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Database of 478 allometric equations to estimate biomass for Mexican trees and forests

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Abstract

• ***Key message*** **We present a comprehensive database of 478 allometric equations to estimate biomass of trees and other life forms in Mexican forest and scrubland ecosystems.**

• ***Context*** Accurate estimation of standing biomass in forests is a prerequisite for any approach to carbon storage and a number of additional applications.

• ***Aims*** To provide a comprehensive database with allometric equations applicable to a large number of tree and shrub species of Mexico.

• ***Methods*** An intensive literature search was carried out to pull together all publications related to allometric equations in the libraries of the most important forest research institutes across Mexico and the neighboring countries.

• ***Results*** A total of 478 equations were compiled. Four hundred fourteen equations included a detailed analysis of all compartments of the trees; 7 equations applied to shrubs, 15 to bamboos, and 2 to palms. The collected equations are applicable to a wide variety of forest ecosystems in Mexico ranging from desert scrublands in the North to lowland evergreen rainforests in the South. The attached database of allometric equations is possibly the most extensive compilation of equations currently available for Mexico.

• ***Conclusion*** The database covers almost 100 % of the individuals recorded in the National Forest Inventory.

Keywords Biomass · Database · Allometric equations

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Contribution of the co-authors Fabiola Rojas-García: compilation of allometric equation database and metadata; writing of methodology and parts of the results and discussion; and elaboration of Fig. 2
Bernardus H.J. de Jong: database analysis and writing of introduction, results and discussion, and elaboration of Tables and Fig. 1
Pablo Martínez-Zurimendí: compilation of a part of the database and contributions to the discussion section
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1 Introduction

The accurate estimation of forest biomass has been crucial for many applications: the commercial use of wood produced in studies of forest production (Morgan and Moss 1985), correlation of forest biomass with stand density (Baskerville 1965), in studies comparing biomass and production for individual tree species (Pastor and Bockheim 1981), in studies on forest fuel estimation (Agee 1983), and recently, to determine the role of forest biomass in the global carbon (C) cycle (Bombelli et al. 2009). Allometric equations are the most commonly used tool to estimate volume or biomass from forest inventory data (e.g., species, tree diameter, and height). Despite their importance, existing

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equations are often scattered over forest research centers, forest administrations, logging companies, and libraries (FAO 2013). The need for accurate equations is driven by the increasing need for information of biomass in forests for climate policy definition and formulation (cf. REDD+), which requires reliable estimations of carbon in forest ecosystems (e.g., Brown 2001; Wirth et al. 2003; Joosten et al. 2004; Rosenbaum et al. 2004). The estimation of the total above-ground biomass (TAGB) with an accuracy that allows the modeling of increments or decrements in carbon stored in the forest over relatively short periods of time (2–10 years) is increasingly required (Basuki et al. 2009). Under the United Nations Framework Convention on Climate Change (UNFCCC) and the 5-year forest resources assessments of FAO, countries need to report regularly the state of their forest resources, biomass densities, and carbon stocks and the results of emerging mechanisms such as Reducing Emissions from Deforestation in Developing Countries (REDD) that will require temporally and spatially fine-grained assessments of carbon stocks (UNFCCC 2008).

Many models are developed for single tree species with different levels of uncertainty (Fehrmann and Kleinn 2006; Návar 2009a). There have also been various attempts to derive more flexible models, applicable for many species or for specific ecosystems, by meta-analysis of published equations to generate an operational database to be used in compliance with the Kyoto protocol (Zianis and Mencuccini 2004; Chave et al. 2005; Zianis et al. 2005; Návar 2010a, b). These models may be adequate to estimate biomass at a national or regional scale, but these may not correctly reflect the tree biomass in a specific area or project (Segura and Kanninen 2005).

The most accurate method for the estimation of biomass is through cutting of trees and weighing of their parts. This destructive method is often used to validate other less intensive and costly methods such as the estimation of carbon stock using nondestructive in-situ measurements and remote sensing (Clark et al. 2001; Wang et al. 2003). Allometric equations developed on the basis of sparse measurements from destructive sampling of trees along a range of tree sizes are statistically related to more easily collected biophysical properties of trees, such as diameter at breast height, wood density, and total height (Basuki et al. 2009) by means of allometric equations. Diameter at breast height is the most commonly used parameter in forest inventories, whereas height normally is measured in a subset of trees to develop diameter-height curves (Bravo et al. 2007).

In Mexico, there have been attempts to review and compile the available equations. Návar (2009a) did a review of equations developed to estimate biomass components of trees and shrubs of different forest communities in arid, semi-arid, subtropical, tropical, and temperate Latin-American ecosystems. De Jong et al. (2009) compiled a database of allometric equations for tree species or genera and equations at the level of ecosystems to estimate the biomass of the trees measured in the national forest inventory This paper is a continuation of the previous efforts to present an overview of the most accessible equations available in the literature to estimate biomass and carbon of Mexican tree species and forests. Henry et al. (2013) stressed the importance of such compilations of equations and pointed out that these should be made available in easy to use databases.

In this study, allometric equations developed for woody species growing in Mexico are compiled, and a database was developed to be used for forest above-ground biomass estimation (stem plus branches and foliage) at the level of individual tree species, species groups, genera, and ecosystems of Mexican forests. These can either be used to estimate biomass in certain forest stands or for national estimations of biomass. We tested the equation data base, to see to what extent it covers the total number of individuals registered in the national forest inventory, carried out between 2004 and 2007.

2 Methods

An extensive revision of the literature was carried out to locate publications with allometric equations to estimate biomass in woody plants of Mexico. In the case of conventional publications (scientific papers and indexed peer-reviewed books), publicly available search engines were used such as Science Direct, Google Academic, Redalyc, and Scopus. Additionally, an extensive search was carried out to locate the so-called grey publications such as thesis, reports, and extensive summaries published in the proceedings of scientific meetings. Physical or virtual visits to academic institutions were carried out to locate these types of publications. In both cases, a series of keywords with logical operators were used to select the relevant literature: biomass, above-ground biomass, above-ground forest biomass, total tree weight, carbon content of biomass, carbon sequestration, harvestable volume, expansion factors for trees, biomass expansion factor, biomass density, carbon density, allometric equations, allometric equations to estimate biomass, and regression models. Once a document with an allometric equation was located, the relevant information was extracted and systematically put into a database with various fields: species, genus, life form, type of vegetation, size of the plant, age of the vegetation, climatic characteristics, type of management, type of allometric equation, and their variables used, among others. More general equations were also put into the database recording the same information such as equations applicable for genera or groups of species, equations applicable for specific ecosystems, and generic type of equations. The equations are grouped according to life form and independent variables used to calculate biomass, type of allometric equation, forest type for which the equation is applicable, and the number of equations in each common plant family. To test the potential of the database, we estimated the number of individuals covered by a biomass equation that are recorded in the National Forest and Soil Inventory 2004–2009 (INFyS). The individuals of the INFyS that were determined at the level of species were taken into consideration (tree, shrub, bamboo, and palm).

The scientific names were analysed with the package Taxonstand version 1.0 (Cayuela et al. 2012) within the R-software environment (R Development Core Team 2012) to correct the scientific names due to taxonomic revisions, orthographic corrections, and elimination of synonyms validating the names according to the latest revisions by taxonomic experts (The Plant List 2010).

We classified the species into the following three groups: (1) species for which the equation database contained an equation at the level of species, (2) species with an equation at the level of genus, and (3) species that are covered by an equation developed for a certain group of species or ecosystem. Once the name of the plants in the INFyS database was checked for consistency, the number of plant records, for which some type of equation was available, was counted.

3 Results

3.1 Literature review

The extensive search for literature included physical and virtual visits to a total of 42 national institutes of higher education and research and 4 foreign institutes. A total of 29 scientific journals were searched with a variety of search engines. A total of 225 documents were located, such as scientific papers, thesis, and extensive memories of scientific events. Each document was checked to evaluate its relevance for the database, as the search with keywords also detected papers, which used allometric equations developed by other authors. As such, a total of 80 documents were selected, from which all relevant data were extracted and inserted in the general database, so as to provide information on the species, the range of the independent variables and site-specific characteristics. Duplicate publications (thesis converted to scientific paper) were eliminated if these contained the same information, which resulted in a final list of 69 documents.

Table 1 Number of equations for each life form and the component evaluated

		Life form				
Stock	Component	Tree	Shrub	Palm	Bamboo	Total
Above-ground biomass	Branches	11			3	14
	Foliage	8			4	12
	Leaves + branches	35				35
	Stem	46			4	50
	Support roots					1
	Whole individual	293	47	2	4	346
Belowground biomass	Roots	5	8			13
Carbon content	Whole individual	15				15
Total		414	47	2	15	478

3.2 Extracted information

A total of 478 allometric equations were collected from the literature to estimate total biomass, carbon in biomass, above-ground biomass, or root biomass for trees (414), shrubs (47), bamboos (15), and palms (2; Table 1).

About 150 equations were specifically developed for one species, whereas 15 equations were developed at the level of genus, and 26 equations were applicable for a group of species or species within a certain ecosystem.

Most of the equations estimated total biomass, although some used an additive formula, summing separately estimated biomass of trunks, branches and leaves, or other parts. The most common variables used in the equations were diameter at breast height (DBH, in 384 equations) and total height (TH, in 96 equations; Table 2).

Other variables used include diameter at other heights (0.30 in 49 equations, 0.10 in 15 equations, and basal diameter in 32 equations), basal area (BA, 19 eq.), crown diameter (DC, 1 eq.), crown height (HC, 3 eq.), trunk volume (Vol, 10 eq.), and stem basal perimeter (BP, 1 eq.; Table 2).

The non-linear equation was the most common type of model published (295 equations) followed by the

Table 2 Number of equations according to life form and independent variables used in the equation

Life form	Variables	Number of equations
Tree	BA, TH	17
	$D_{0.30}$, TH	4
	$D_{0.30}$	3
	DBH,WD	1
	DBH, TH, WD	4
	DBH	320
	DBH, TH	43
	$D_{0.10}$	2
	$D_{0.0}$, TH	5
	BP	1
	RC1, RC2	1
	Vol	10
Shrub	BA, TH	2
	DC	1
	RC1, RC2, HC	3
	$D_{0.10}$	13
	$D_{0.0}$	9
	$D_{0.0}$, TH	18
	TH	1
Bamboo	DBH	15
Palm	DBH, TH	2
Total		478

BA basal area, *TH* total height, $D_{0.30}$ diameter of the stem at 30 cm, *DBH* diameter at breast height (1.30 m), *WD* wood density, $D_{0.10}$ diameter of the stem at 10 cm, $D_{0.0}$ basal diameter of the stem, *BP* basal perimeter of the stem, *RC1, RC2* radii of two orthogonal diameters of the crown, *Vol* volume of the trunk with bark, *DC* average diameter of the tree canopy, *HC* height of the tree canopy

exponential type of equations (112 eq.), whereas 52 equations were polynomial, two linear and 17 equations had at least part of the variables expressed at a logarithmic scale (Table 3).

Table 3 Number of allometric equations according to equation type

Type of equation	Number of equations
Linear equation	2
Polynomial equation	52
Exponential equation	112
Non-linear equation	295
Logarithmic equation	17

Table 4 Number of equations recorded according to type of forest

Ecoregion	Forest type	Number of equations
Upland forests	Cultivated forest	41
	Conifer forest	18
	Pine forest	73
	Pine-oak forest	78
	Oak forest	6
	Cloud forest	32
Scrublands	Scrubland	59
	Submontane scrubland	21
Lowland forests	Deciduous forest	95
	Semi-deciduous forest	25
	Semi-evergreen forest	4
	Evergreen forest	15
	Inundated forests (including mangroves)	11

Most of the equations were applicable for species belonging to seven upland forest types (228 equations), whereas 150 equations were found for five lowland forest types, whereas 80 equations are associated with two types of scrubland vegetation (Table 4).

Taking into consideration the taxonomic representation, the highest number of equations were developed for species belonging to the *Pinaceae* (mostly *Pinus*), which represents the family with the most important commercial species, followed by *Fabacea* and *Fagaceae*, also economically important

Table 5 Number of equations applicable to species within the most common Mexican plant families

Plant family	Number of equations
Pinaceae	132
Fabaceae	73
Fagaceae	50
Euphorbiaceae	15
Poaceae	15
Asteraceae	11
Malvaceae	11
Burseraceae	10
Rutaceae	10
Remaining families (45)	122
Equations for species of more than one family	29

Table 6 Application of allometric equations for *Pinus patula* to data of trees recorded in the national forest inventory

Allometric equation	State of Mexico	DAP minimum (cm)	DAP maximum (cm)	All records INFyS	INFyS records
Pacheco 2011	Oaxaca	5.0	30.0	R^2=0.945	R^2=0.947
Castellanos et al. 1996	Puebla	5.0	45.0	R^2=0.935	R^2=0.943
Díaz 2005	Tlaxcala	6.7	64.1	R^2=0.894	R^2=0.932

families; all together, these three families covered by about 50 % of all equations (Table 5). Various *Pinus* species had more than one equation, developed in different geographic entities. (See Table 6.)

For Pinus patula, a total of 14 equations have been published; of which, seven estimate total above-ground biomass with varying range of diameters for which the equations are applicable. For example, Pacheco (2011) developed the equation in the state of Oaxaca for individuals with DBH between 5 and 30 cm Castellanos *et al*. (1996): in Puebla, with indidividuals with DBH between 5 and 45 cm; and Díaz (2005) in Tlaxcala, with a range of DBH between 6.7 and 64.1 cm.

Comparing the outcome of the three models, estimating the biomass of individuals registered in the national inventory, shows that they do not differ much even outside the range of diameters for which they were developed (Fig. 1).

The models were developed in 26 out of 32 federal states, with the highest numbers of equations in Durango and Chihuahua; both are very important wood-producing states.

Some models were developed for species occurring in more than one state (Návar et al. 2004a, b; Návar 2009a, b; Návar 2010a, b). In the Appendix, we present all the equations of the database.

Most of the reports include some measures of confidence of the equation to replicate the results, such as the proportion of variance explained by the model, the difference between the estimator and the real value, or standard error.

3.3 Potential use of the equations

To test the extent to which the collected equations apply to the national forest inventory data, we compared the equation database with the 1,023,723 individuals recorded in the National Forest and Soil Inventory 2004–2009 (INFyS). The INFyS contain individuals belonging to 2623 species of 787 taxonomic genera. After the analysis

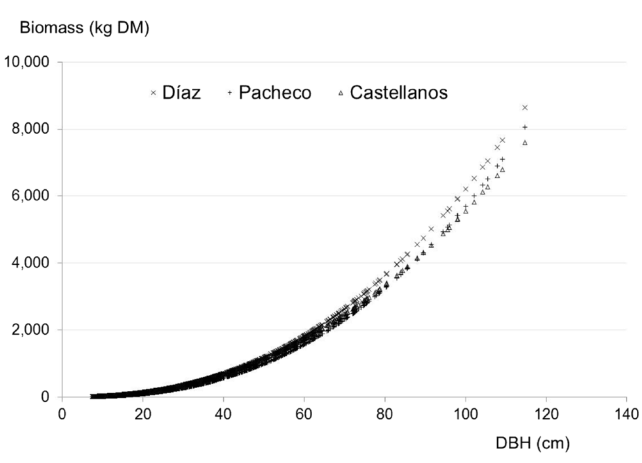

Fig. 1 Application of three published models of *Pinus patula* to all data of the species recorded in the national inventory Castellanos et al. 1996; Pacheco 2011; Díaz 2005

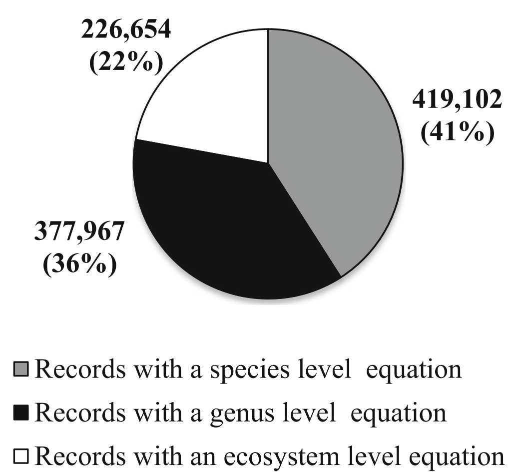

Fig. 2 Number and percentage of woody species registered in the National Forest Inventory (2004–2007) that have an allometric equation that correspond to one particular species, to species groups, and to ecosystem type

with Taxonstand, the inventory contained 2175 species of 708 genera.

A total of 41 % of the individuals of the INFyS were covered by a specific equation, 36 % by an equation developed for a genus, and the remaining 22 % were almost completely covered by either a species group or ecosystem equation. Thus, almost 100 % of the individuals of the INFyS are covered one or more nationally developed allometric equation to estimate the biomass (Fig. 2).

4 Discussion

The allometric models for woody plant species of Mexico cover a wide range of species and forest ecosystems, parameters used to relate biomass to tree structural variables, and type of regression. More than 40 % of the individuals recorded in the INFyS 2004–2009 are covered by a species-specific allometric equation. Biomass can be estimated with equations that have been developed either for the same species, species belonging to the same genus or ecosystem, each with their specific level of uncertainty. Application of empirical equations outside the region from which they were developed or extrapolation of biomass estimated beyond the range of the independent variables could unpredictably increase uncertainty. If the equation is developed for smaller trees, applying it to trees much larger than the range increases substantially the uncertainty of the estimation (Brown 1997).

In order to reduce the uncertainty of the models in relation to applying these to trees outside the dimensions for which the model was developed or outside the ecological condition where the sampled trees occurred, or other factors that may create the uncertainty in the estimations, a sampling procedure needs to be designed to validate, simplify or adjust the available models, such as the small trees sampling scheme proposed by Zianis and Mencuccini (2004) or the non-sampling scheme methodology proposed by Návar (2010a, b), who applied the Central Limit Theorem for equations of neighboring tree species or genus. Bayesian analysis may also provide the means to circumvent such caveats, as well.

Due to the high diversity of tree species, it is not efficient to develop models for each species. Validating and improving models developed for certain ecosystems may be a viable solution, such as the incorporation of wood density as an independent variable (Urquiza-Haas et al. 2007; Chave et al. 2014).

Also, equations that use total height (TH) and DBH as independent variables are generally more widely applicable than equations with only DBH, as these may capture better the variation in the DBH/TH ratio due to ecological conditions. Návar et al. (2013) found that other more complex variables such as tree slenderness (DBH/TH), tree cylindrical (VOL/(DBH^2TH)) or a compound form factor (DBH/TH*VOL/(DBH^2TH)) explain much more above-ground variability than H alone, and avoid multicollinearity problems. Furthermore, height is often difficult to measure, particularly in dense tropical forests. Equally, if ecological conditions of the trees in the inventory are very different from the conditions where the equation was developed, the tree architecture may change substantially (Rykiel 1996; Oldeman 1990). Particularly in countries like Mexico where a high variety of ecological conditions and management practices may create a high variety in architectural structures of the trees of the same species, it is important to estimate the error associated with this variation. Other factors that may influence the distribution of biomass and as such the uncertainty in biomass estimations, are related to the openness or closeness of the canopy, where more biomass is allocated to branches in trees growing in open spaces, compared to the same species in closed canopies (see also Dietze et al. 2008). As such, the slenderness, cylindrical or composite form factors introduced by Návar (2010b) explain physically this variance.

The type of equation may also influence its applicability outside the range for which it was developed. Non-linear models of the type $B=a.\ DBH^b$ are more robust outside the range for which these are developed (e.g., see Fig. 1) and as these approach the fractal allometry of B in relation to DBH (West et al. 1999; Zianis and Mencuccini 2004) in contrast to polynomial models that often present abnormal behavior outside its range, such as negative values or reducing the estimation with increasing DBH.

5 Conclusions

Mexico possesses a great wealth of allometric equations to estimate biomass of a high variety of tree species or forest ecosystems. This paper tries to compile the most accessible models published in the literature and to make these available for scientific research, developing national biomass estimations of the forest ecosystem, or to design a scheme to validate the use of each of them. Efforts to improve the database directed toward validating the models under different conditions with cost-effective sampling and modeling procedures, such as those proposed by Zianis and Mencuccini (2004), are key to reduce the uncertainties of the estimations of biomass.

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Appendix

Table 7 Allometric equations to estimate biomass of Mexican forests

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [B]	Bamboo	*Bambusa oldhamii*	[Exp[2.75]*[DBH^1.82]]	g	22	0.8000		Veracruz	CF	Castañeda et al. 2005
AGB [B]	Bamboo	*Bambusa oldhamii*	[Exp[3.93]*[DBH^1.47]]	g	22	0.4800		Veracruz	CF	Castañeda et al. 2005
AGB [B]	Bamboo	*Bambusa oldhamii*	[Exp[3.40]*[DBH^1.70]]	g	22	0.7500		Veracruz	CF	Castañeda et al. 2005
AGB [F]	Bamboo	*Bambusa oldhamii*	[Exp[4.57]*[DBH^1.29]]	g	22	0.7500		Veracruz	CF	Castañeda et al. 2005
AGB [F]	Bamboo	*Bambusa oldhamii*	[Exp[4.36]*[DBH^1.48]]	g	22	0.8300		Veracruz	CF	Castañeda et al. 2005
AGB [F]	Bamboo	*Bambusa oldhamii*	[Exp[4.03]*[DBH^1.66]]	g	22	0.8300		Veracruz	CF	Castañeda et al. 2005
AGB [F]	Bamboo	*Bambusa oldhamii*	[Exp[4.59]*[DBH^1.36]]	g	22	0.7400		Veracruz	CF	Castañeda et al. 2005
AGB [S]	Bamboo	*Bambusa oldhamii*	[Exp[6.74]*[DBH^1.23]]	g	22	0.7300		Veracruz	CF	Castañeda et al. 2005
AGB [S]	Bamboo	*Bambusa oldhamii*	[Exp[5.46]*[DBH^1.89]]	g	22	0.7500		Veracruz	CF	Castañeda et al. 2005
AGB [S]	Bamboo	*Bambusa oldhamii*	[Exp[4.48]*[DBH^2.43]]	g	22	0.9300		Veracruz	CF	Castañeda et al. 2005
AGB [S]	Bamboo	*Bambusa oldhamii*	[Exp[5.66]*[DBH^1.70]]	g	22	0.8300		Veracruz	CF	Castañeda et al. 2005
AGB [WI]	Bamboo	*Bambusa oldhamii*	[Exp[6.85]*[DBH^1.24]]	g	22	0.7700		Veracruz	CF	Castañeda et al. 2005
AGB [WI]	Bamboo	*Bambusa oldhamii*	[Exp[5.75]*[DBH^1.84]]	g	22	0.7900		Veracruz	CF	Castañeda et al. 2005
AGB [WI]	Bamboo	*Bambusa oldhamii*	[Exp[5.07]*[DBH^2.23]]	g	22	0.9500		Veracruz	CF	Castañeda et al. 2005
AGB [WI]	Bamboo	*Bambusa oldhamii*	[Exp[6.02]*[DBH^1.64]]	g	22	0.8700		Veracruz	CF	Castañeda et al. 2005
AGB [WI]	Palm	*Astrocaryum mexicanum*	[[Exp[3.6272]]*[[DBH^2*TH]^0.5768]]*[1.02]/1000000	Mg	15	0.7300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Palm	*Chamaedorea*	[[Exp[3.6272]]*[[DBH^2*TH]^0.5768]]*[1.02]/1000000	Mg	15	0.7300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Shrub	*Acacia berlandieri*	[[0.006009]+[0.241108*TH]+[0.000847*[$D_{0.0}$^2*TH]]−[0.47883*[ln[TH]]]]+[[1.946]+[0.01667*[$D_{0.0}$^2*TH]]]+[[−0.8765]+[0.541821*$D_{0.0}$]]	kg	79	0.7600		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Acacia farnesiana*		kg	18	0.9500			TT	Návar et al. 2004a

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
			[[1.1856]+[0.7046*$D_{0.0}$]−[2.9935*[ln $D_{0.0}$]]]+ [[18.48]+[13.01*$D_{0.0}$]−[53.9*[ln $D_{0.0}$]]+ [[−4.4576]+[1.4946*$D_{0.0}$]]]					Coahuila, Nuevo León, Tamaulipas		
AGB [WI]	Shrub	*Acacia rigidula*	[[0.2984]−[0.3663*TH]+[0.8857*[ln TH]]+ [0.001589*[$D_{0.0}$^2*TH]]]+[[1.7299]− [1.7568*TH]+[0.02176*[$D_{0.0}$^2*TH]]+ [1.1115*[ln[$D_{0.0}$ $D_{0.0}$^2*TH]]]+[[0.5772]+ [0.011244*[$D_{0.0}$^2*TH]]]]	kg	78	0.9200		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Apoplanesia paniculata*	[10^[−0.8092]*[BA*0.94*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Shrub	*Atriplex canescens*	[[−1.424]+[2.781]]*[DC]	kg	51	0.5700	1.041	Zacatecas	DS	Castañuela 2013
AGB [WI]	Shrub	*Baccharis conferta*	[Exp[4.0021135+[[0.018134*TH]/100]]]	kg	20	0.7250		Veracruz	PF	Mendoza and Galicia 2010
AGB [WI]	Shrub	*Baccharis ramulosa*	[101.089]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^0.99]]	g	9	0.9900		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Baccharis ramulosa*| *Bouvardia ternifolia*| *Brickellia veronicifolia* | *Calliandra grandiflora*| *Echeveria gibbiflora*| *Eupatorium petiolare*| *Iresine calea*| *Lagascea rigida*| *Loeselia mexicana*| *Montanoa tomentosa*| *Senecio praecox*| *Stevia salicifolia*| *Verbesina virgata*	[49.607]*[[3.1416]*[[[$D_{0.10}$^2]/4]]^1.186]]	g	120	0.9550		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Bernardia myricaefolia*	[0.1498]−[0.0609*$D_{0.0}$]+[0.004448*[$D_{0.0}$^2 *TH]]+ [[−3.72131]+[0.24869*$D_{0.0}$]+ [5.1932*TH]−[10.4555*[ln TH]+[[3.7213]+ [0.248698*$D_{0.0}$]+[5.1932*TH]−[10.455*[ln TH]]]]]	kg	52	0.8100		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Bouvardia ternifolia*	[48.618]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.3]]	g	12	0.9460		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Brickellia veronicifolia*	[112.505]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.493]]	g	10	0.8210		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Calliandra grandiflora*	[115.584]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.490]]	g	5	0.9860		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Carlowrightia arizonica*| *Justicia californica*| *Matelea cordifolia*| *Brickellia coulteri*| *Encelia farinosa*| *Trixis californica*| *Bursera fagaroides*| *Bursera laxiflora*| *Bursera microphylla*| *Mammilaria grahamii*| *Opuntia gosseliniana*| *Opuntia leptocaulis*| *Opuntia thurberi*| *Opuntia versicolor*| *Peniocereus striatus*| *Evolvulus alsinioides*| *Ibervillea sonorae*| *Adelia brandegeei*| *Croton sonorae*| *Jatropha cardiophylla*| *Jatropha cordata*| *Acacia willardiana*| *Coursetia glandulosa*| *Eysenhardtia orthocarpa*| *Marina*	[340.308]*[[[3.1416]*RC1*RC2*HC]^1.115]	g	779	0.7430		Sonora	DS	Búrquez et al. 2010

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
		parryi| *Mimosa distachya*| *Nissolia schottii*| *Parkinsonia microphylla*| *Senna covesii*| *Janusia californica*| *Janusia linearis*| *Abutilon incanum*| *Passiflora foetida*| *Cardiospermum corindum*| *Lycium*| *Ayenia filiformis*|								
AGB [WI]	Shrub	*Carlowrightia arizonica*| *Phaulothamnus spinescens*| *Matelea cordifolia*| *Bebbia juncea*| *Encelia farinosa*| *Trixis californica*| *Bursera laxiflora*| *Mammilaria grahamii*| *Mammilaria mainae*| *Opuntia fulgida*| *Opuntia leptocaulis*| *Opuntia thurberi*| *Opuntia versicolor*| *Merremia palmeri*| *Ibervillea sonorae*| *Croton sonorae*| *Jatropha cardiophylla*| *Acacia constricta*| *Caesalpinia palmeri*| *Desmanthus covillei*| *Eysenhardtia orthocarpa*| *Marina parryi*| *Mimosa distachya*| *Nissolia schottii*| *Olneya tesota*| *Fouquieria macdougalii*| *Krameria erecta*| *Janusia californica*| *Janusia linearis*| *Mascagnia macropthera*| *Abutilon incanum*| *Randia obcordata*| *Cardiospermum corindum*| *Lycium*| *Nicotiana glauca*| *Phoradendron californicum*| *Cissus trifoliata*	[356.983]*[[[3.1416]*RC1*RC2*HC]^1.416]	g	783	0.9440		México	Sonora	DS
AGB [WI]	Shrub	*Celtis pallida*	[[−0.02387]+[0.071082*$D_{0.0}$]]+[[0.822031]−[0.3336*$D_{0.0}$]+[0.027934*[$D_{0.0}$^2*TH]]+[[−0.97513]+[0.622086*$D_{0.0}$]]]	kg	27	0.9500		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Condalia hookeri*	[[−0.49169]+[0.119894*$D_{0.0}$]]+[[−1.34514]−[0.57648*$D_{0.0}$]+[0.036956*[$D_{0.0}$^2*TH]]−[0.07861*[ln[$D_{0.0}$^2*TH]]]+[[−2.28529]+[6.281245*TH]+[0.004902*[$D_{0.0}$^2*TH]]−[14.8795*[ln TH]]]]	kg	29	0.8800		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Cordia boissieri*	[[−0.80889]+[0.708933*TH]+[3.4441*[ln[$D_{0.0}$]]]−[1.52967*[ln[$D_{0.0}$^2*TH]]+[[−5.1898]+[4.051755*TH]+[0.953933]−[8.3199*[ln TH]]]+[[0.402273][0.79265*TH]+[0.429856*$D_{0.0}$]+[0.007672]*[$D_{0.0}$^2*TH]]]]	kg	96	0.7000		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Diospyros texana*	[[−0.4384]+[0.12124*[ln[$D_{0.0}$^2*TH]]+[0.072176*TH]]+[[3.32259]+[0.010964*[$D_{0.0}$^2*TH]]+[[0.937974]+[0.0126* [$D_{0.0}$^2*TH]]]]]	kg	63	0.8900		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Echeveria gibbiflora*	[1.552]*[[3.1416]*[[[[$D_{0.0}$^2]/4]]^1.345]]	g	12	0.8890		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Eupatorium petiolare*	[81.532]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.352]]	g	10	0.9770		Distrito Federal	XS	Cano 1994

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Shrub	*Eysenhardtia polystachya*	[[−0.00842]−[0.02042*TH]+[0.06316*[ln[$D_{0.0}$^2*TH]]+[[−0.912571]-[0.10608*TH]+[0.009052*[ln TH]+[0.009085*[$D_{0.0}$^2*TH]]+[[−0.089769]+[0.171654*TH]+[0.007258*[$D_{0.0}$^2*TH]]]]]]	kg	42	0.7400		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Forestiera angustifolia*	[[−0.062164]+[0.011566*[$D_{0.0}$^2*TH]]+[0.05652*[ln[$D_{0.0}$^2*TH]]]+[[−0.088]+[0.115089*[$D_{0.0}$^2*TH]]]+[[−0.08742]+[0.014452*[$D_{0.0}$^2*TH]]]]	kg	18	0.9800		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Gochnatia hypoleuca*	[[−0.69334]+[0.335057*[ln[$D_{0.0}$^2*TH]]]+[[−2.18807]+[1.046488*ln[$D_{0.0}$^2*TH]]+[0.008012*[$D_{0.0}$^2*TH]]+[[−0.10528]+[1.061613*$D_{0.0}$]−[2.68152*[ln $D_{0.0}$]]]]]	kg	29	0.9300		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Helietta parvifolia*	[[−0.17395]+[0.002432*[$D_{0.0}$^2*TH]]−[1.24942*TH]+[4.2865*[ln TH]]−[0.18844*[ln $D_{0.0}$]]]+[[−20.99959]+[0.056192*[$D_{0.0}$^2*TH]]−[4.382*TH]−[1.90569*$D_{0.0}$]]+[[−3.7336]+[0.025468*[$D_{0.0}$^2*TH]−[0.094648*$D_{0.0}$]]]	kg	72	0.8200		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Iresine calea*	[63.307]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.186]]	g	9	0.9350		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Lagascea rigida*	[54.163]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.160]]	g	4	1.0000		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Loeselia mexicana*	[36.198]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^0.958]]	g	10	0.8330		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Matelea cordifolia*| *Encelia farinosa*| *Bursera laxiflora*| *Mammilaria grahamii*| *Opuntia fulgida*| *Opuntia leptocaulis*| *Opuntia thurberi*| *Opuntia versicolor*| *Jatropha cardiophylla*| *Caesalpinia palmeri*| *Mimosa distachya*| *Olneya tesota*| *Janusia californica*| *Janusia linearis*| *Abutilon incanum*| *Randia obcordata*| *Cardiospermum corindum*|*Nicotiana glauca*|*Guaiacum coulteri*	[896.501]*[[[3.1416]*RC1*RC2*HC]^1.66]	g	388	0.8810		Sonora	DS	Búrquez et al. 2010
AGB [WI]	Shrub	*Montanoa tomentosa*	[109.508]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.472]]	g	9	0.9310		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Opuntia excelsa*	[10^[−0.8092]*[BA*0.30*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Shrub	Other shrub species	[−0.05266]+[[0.000052]*TH]+[[0.092582]*[ln[$D_{0.0}$^2*TH]]]+[0.109003]+[[0.014021]*[ln[$D_{0.0}$^2*TH]]−[[1.62531]*TH]+[[0.89543]*[ln[$D_{0.0}$^2*TH]]]+[0.3558]+[[0.010336]*[$D_{0.0}$^2*TH]]]−[[0.51147]*$D_{0.0}$]+[[1.5063]*[ln[$D_{0.0}$]]]	kg	86	0.6500		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Pithecellobium ebano*	[−0.9523]+[0.002317*[$D_{0.0}$^2*TH]]+[−1.28375]+[0.027484*[$D_{0.0}$^2*TH]]+[3.08371]+[0.025196*[$D_{0.0}$^2*TH]]	kg	16	0.7900		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Pithecellobium pallens*	[−0.00523]+[0.000689*[$D_{0.0}$^2*TH]]+[0.8018*[ln $D_{0.0}$]]+[0.332213]+[0.017196*[$D_{0.0}$^2*TH]]−	kg	123	0.7900		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
			[0.94861*$D_{0.0}$]+[3.388551*[ln $D_{0.0}$]]+ [−0.58367]+[0.004255*[$D_{0.0}$^2*TH]]+ [0.393071*$D_{0.0}$]							
AGB [WI]	Shrub	*Prosopis glandulosa*	[0.6920]*[$D_{0.0}$^1.7922]	kg	18	0.9228		Baja California	DS	Méndez et al. 2006
AGB [WI]	Shrub	*Prosopis glandulosa*	[0.15545]+[0.110531*$D_{0.0}$]+[0.000797*[$D_{0.0}$^2*TH]]+ [4.2362]+[3.2482*$D_{0.0}$]−[11.6949*[ln $D_{0.0}$]]+ [−2.04254]+[0.387649*$D_{0.0}$]+[0.5166*TH]	kg	38	0.9700		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Prosopis laevigata*	[0.346]*[$D_{0.0}$^1.679]	kg	10	0.9700		Durango	DS	Méndez et al. 2012
AGB [WI]	Shrub	*Prosopis laevigata*	[0.056]*[$D_{0.0}$^2.383]	kg	30	0.9800		Durango	DS	Méndez et al. 2012
AGB [WI]	Shrub	*Prosopis laevigata*	[0.108]*[$D_{0.0}$^2.2]	kg	14	0.9100		Zacatecas	DS	Méndez et al. 2012
AGB [WI]	Shrub	*Prosopis laevigata*	[0.127]*[$D_{0.0}$^2.161]	kg	15	0.9500		Zacatecas	DS	Méndez et al. 2012
AGB [WI]	Shrub	*Prosopis laevigata*	[0.041]*[$D_{0.0}$^2.513]	kg	27	0.9400		Chihuahua	DS	Méndez et al. 2012
AGB [WI]	Shrub	*Prosopis laevigata*	[0.018]*[$D_{0.0}$^2.767]	kg	22	0.9700		Chihuahua	DS	Méndez et al. 2012
AGB [WI]	Shrub	*Prosopis laevigata*	[0.751]*[$D_{0.0}$^1.458]	kg	26	0.9500		Coahuila	DS	Méndez et al. 2012
AGB [WI]	Shrub	*Prosopis laevigata*	[[0.14775]+[0.000659*[$D_{0.0}$^2*TH]]+[0.118172*$D_{0.0}$]]+ [[2.981]+[0.006699*[$D_{0.0}$^2*TH]]+ [1.221108*$D_{0.0}$]]+[[−0.62634]+ [0.001711*[$D_{0.0}$^2*TH]]+[0.313902*$D_{0.0}$]]	kg	29	0.9200		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [WI]	Shrub	*Senecio praecox*	[10.064]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.419]]	g	10	0.9420		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Stevia salicifolia*	[83.013]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.406]]	g	10	0.9890		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Verbesina virgata*	[70.176]*[[3.1416]*[[[[$D_{0.10}$^2]/4]]^1.347]]	g	10	0.9600		Distrito Federal	XS	Cano 1994
AGB [WI]	Shrub	*Zanthoxylum fagara*	[−0.58283]+[0.000668*[$D_{0.0}$^2*TH]]−[0.29147*[ln TH]]+[3.288]+[1.1233*$D_{0.0}$]+[0.84592*[ln TH]]+[1.08316]+ [0.005911*[$D_{0.0}$^2*TH]]−[0.11339*TH]	kg	18	0.8000		Coahuila, Nuevo León, Tamaulipas	TT	Návar et al. 2004a
AGB [B]	Tree	*Abies religiosa*	[1.5842]*[Exp[0.044*DBH]]	kg	10	0.6170		Estado de México	FF	Flores et al. 2011
AGB [B]	Tree	*Avicennia germinans*	[Exp[−2.5845]*[DBH^1.8200]]	kg	33	0.8400		Campeche	M	Day et al. 1987
AGB [B]	Tree	*Hevea brasiliensis*	[−2.52112]+[[0.005151]*[[DBH^2]*[TH]]]	kg	20	0.4600		Veracruz	CF	Monroy and Návar 2004
AGB [B]	Tree	*Laguncularia racemosa*	[Exp[−2.9622]*[DBH^1.7299]]	kg	34	0.6800		Campeche	M	Day et al. 1987
AGB [B]	Tree	*Pinus durangensis*	[3.6406]*[DBH^0.7429]	g	72	0.7429		Durango	PF	Montes de Oca et al. 2009
AGB [B]	Tree	*Pinus greggii*	[0.401]+[[0.0066]*[[DBH^2]*TH]]	kg	30	0.8592		Coahuila	PF	Aguilar 2009

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [B]	Tree	*Pinus greggii*	[−867.23]+[[57.34]*[DBH^2]]	g	20	0.9526		Coahuila	CF	Mora 2010
AGB [B]	Tree	*Pinus patula*	[0.0329]*[DBH^2.1683]	kg	18	0.9300		Oaxaca	POF	Pacheco 2011
AGB [B]	Tree	*Pinus patula*	[Exp[−4.45555]*[DBH^2.33251]]	kg	27	0.9600		Puebla	PF	Castellanos et al. 1996
AGB [B]	Tree	*Rhizophora mangle*	[Exp[−2.8633]*[DBH^2.3286]]	kg	35	0.9000		Campeche	M	Day et al. 1987
AGB [B]	Tree	*Zanthoxylum kellermanii*	[0.00062]*[DBH^3.2722]	kg	22	0.9600		Oaxaca	ETF	Manzano 2010
AGB [F]	Tree	*Abies religiosa*	[0.8413]*[Exp[0.0398*DBH]]	kg	10	0.5880		Estado de México	FF	Flores et al. 2011
AGB [F]	Tree	*Pinus durangensis*	[5.4961]*[DBH^2.4123]	g	72	0.7445		Durango	PF	Montes de Oca et al. 2009
AGB [F]	Tree	*Pinus greggii*	[0.6391]+[[0.0014]*[[DBH^2]*TH]]	kg	30	0.6039		Coahuila	PF	Aguilar 2009
AGB [F]	Tree	*Pinus greggii*	[10954]+[[−2557.15]*DBH]+[[169.04]*[DBH^2]]	g	20	0.9030		Coahuila	CF	Mora 2010
AGB [F]	Tree	*Pinus patula*	[0.1483]*[DBH^1.3707]	kg	18	0.8800		Oaxaca	POF	Pacheco 2011
AGB [F]	Tree	*Pinus patula*	[Exp[−3.19559]*[DBH^2.02051]]	kg	27	0.9200		Puebla	PF	Castellanos et al. 1996
AGB [F]	Tree	*Pinus patula*	[29.440]*[Exp[[−26.519]/DBH]]	kg	18	0.9010		Hidalgo	POF	Figueroa et al. 2010
AGB [F]	Tree	*Zanthoxylum kellermanii*	[0.00942]*[DBH^1.8329]	kg	22	0.9800		Oaxaca	ETF	Manzano 2010
AGB [LB]	Tree	*Acacia cochliacantha*	[0.0053]*[DBH^2.96]	kg	10	0.6600		Sinaloa	TDF	Návar 2009b
AGB [LB]	Tree	*Bursera penicillata*	[0.0053]*[DBH^2.96]	kg	5	0.6600		Sinaloa	TDF	Návar 2009b
AGB [LB]	Tree	*Bursera penicillata*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Bursera penicillata*| *Ceiba acuminata*| *Haematoxylon brasiletto*| *Ipomoea arborescens*| *Pithecellobium mangense*| *Erythrina guatemalensis*| *Guazuma ulmifolia*| *Lysiloma divaricata*| *Rubus palmeri*|	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Ceiba acuminata*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Ceiba acuminata*	[0.0053]*[DBH^2.96]	kg	5	0.6600		Sinaloa	TDF	Návar 2009b
AGB [LB]	Tree	*Cochlospermum vitifolium*	[0.0053]*[DBH^2.96]	kg	5	0.6600		Sinaloa	TDF	Návar 2009b
AGB [LB]	Tree	*Erythrina guatemalensis*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Guazuma ulmifolia*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Haematoxylon brasiletto*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Ipomoea arborescens*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Jatropha angustifolia*	[0.0053]*[DBH^2.96]	kg	5	0.6600		Sinaloa	TDF	Návar 2009b
AGB [LB]	Tree	*Lysiloma divaricatum*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Lysiloma divaricatum*	[0.0053]*[DBH^2.96]	kg	10	0.6600		Sinaloa	TDF	Návar 2009b
AGB [LB]	Tree	*Pinus*	[0.0565]*[DBH^2.2729]	kg	81	0.6900		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus arizonica*	[0.0063]*[DBH^2.8284]	kg	66	0.8700		Chihuahua, Durango	PF	Návar 2009c

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [LB]	Tree	*Pinus ayacahuite*	[0.6437]*[DBH^1.6020]	kg	58	0.9200		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus cembroides*	[Exp[0.5474]*[DBH^0.9738]]	kg	30	0.3716		Zacatecas	DS	Guerrero 2013
AGB [LB]	Tree	*Pinus cooperi*	[0.0254]*[DBH^2.4828]	kg	49	0.6800		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus devoniana*	[0.044]*[DBH^2.117]	kg	20	0.5700		Guanajuato	CF	Méndez et al. 2011
AGB [LB]	Tree	*Pinus durangensis*	[0.0175]*[DBH^2.5739]	kg	384	0.6700		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus engelmannii*	[0.2883]*[DBH^1.7343]	kg	81	0.7200		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus herrerae*	[0.2883]*[DBH^1.7343]	kg	81	0.7200		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus leiophylla*	[0.0255]*[DBH^2.5507]	kg	27	0.9100		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus oocarpa*	[0.2883]*[DBH^1.7343]	kg	81	0.7200		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus oocarpa*| *Pinus engelmannii*| *Pseudotsuga menziesii*| *Pinus herrerae*	[0.2883]*[DBH^1.7343]	kg	81	0.7200		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pinus pseudostrobus*	[0.001]*[DBH^3.954]	kg	20	0.8400		Guanajuato	CF	Méndez et al. 2011
AGB [LB]	Tree	*Pinus teocote*	[0.4452]*[DBH^1.7682]	kg	56	0.8900		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Pithecellobium mangense*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [LB]	Tree	*Pseudotsuga menziesii*	[0.2883]*[DBH^1.7343]	kg	21	0.7200		Chihuahua, Durango	PF	Návar 2009c
AGB [LB]	Tree	*Quercus*	[0.0202]*[DBH^2.6480]	kg	118	0.8600		Chihuahua, Durango	OPF	Návar 2009c
AGB [LB]	Tree	*Quercus sideroxyla*	[0.0202]*[DBH^2.6480]	kg	51	0.8600		Chihuahua, Durango	OPF	Návar 2009c
AGB [LB]	Tree	*Quercus gambelii*	[0.0202]*[DBH^2.6480]	kg	118	0.8600		Chihuahua, Durango	OPF	Návar 2009c
AGB [LB]	Tree	*Quercus rugosa*	[0.0202]*[DBH^2.6480]	kg	118	0.8600		Chihuahua, Durango	OPF	Návar 2009c
AGB [LB]	Tree	*Rubus palmeri*	[0.0433]*[DBH^2.3929]	kg	39	0.8100		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Abies religiosa*	[0.0173]*[DBH^2.7459]	kg	10	0.9280		Estado de México	FF	Flores et al. 2011
AGB [S]	Tree	*Acacia cochliacantha*	[0.083]*[DBH^2.23]	kg	10	0.7700		Sinaloa	TDF	Návar 2009b
AGB [S]	Tree	*Avicennia germinans*	[Exp[−2.0199]*[DBH^2.4399]]	kg	33	0.9700		Campeche	M	Day et al. 1987
AGB [S]	Tree	*Bursera penicillata*	[0.083]*[DBH^2.23]	kg	5	0.7700		Sinaloa	TDF	Návar 2009b
AGB [S]	Tree	*Bursera penicillata*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Bursera penicillata*| *Ceiba acuminata*| *Haematoxylon brasiletto*| *Ipomoea arborescens*| *Pithecellobium mangense*| *Erythrina guatemalensis*| *Guazuma ulmifolia*| *Lysiloma divaricata*| *Rubus palmeri*|	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Ceiba acuminata*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Ceiba acuminata*	[0.083]*[DBH^2.23]	kg	5	0.7700		Sinaloa	TDF	Návar 2009b
AGB [S]	Tree	*Cochlospermum vitifolium*	[0.083]*[DBH^2.23]	kg	5	0.7700		Sinaloa	TDF	Návar 2009b
AGB [S]	Tree	*Erythrina guatemalensis*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [S]	Tree	*Guazuma ulmifolia*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Haematoxylon brasiletto*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Hevea brasiliensis*	[16.02547]+[[0.013939]*[[DBH^2]*[TH]]]	kg	20	0.8500		Veracruz	CF	Monroy and Návar 2004
AGB [S]	Tree	*Ipomoea arborescens*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Jatropha angustifolia*	[0.083]*[DBH^2.23]	kg	5	0.7700		Sinaloa	TDF	Návar 2009b
AGB [S]	Tree	*Laguncularia racemosa*	[Exp[−2.0794]*[DBH^2.3861]]	kg	34	0.9900		Campeche	M	Day et al. 1987
AGB [S]	Tree	*Lysiloma divaricatum*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Lysiloma divaricatum*	[0.083]*[DBH^2.23]	kg	10	0.7700		Sinaloa	TDF	Návar 2009b
AGB [S]	Tree	*Pinus*	[0.0726]*[DBH^2.4459]	kg	81	0.8900		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus arizonica*	[0.0992]*[DBH^2.2674]	kg	66	0.9600		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus ayacahuite*	[0.0690]*[DBH^2.4515]	kg	58	0.9700		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus cembroides*	[Exp[−0.3712]*[DBH^1.2663]]	kg	30	0.5394		Zacatecas	DS	Guerrero 2013
AGB [S]	Tree	*Pinus cooperi*	[0.1899]*[DBH^2.2270]	kg	49	0.9600		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus devoniana*	[0.156]*[DBH^1.808]	kg	20	0.8500		Guanajuato	CF	Méndez et al. 2011
AGB [S]	Tree	*Pinus durangensis*	[3.8048]*[DBH^2.9340]	g	72	0.7388		Durango	PF	Montes de Oca et al. 2009
AGB [S]	Tree	*Pinus durangensis*	[0.1314]*[DBH^2.2815]	kg	384	0.8700		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus engelmannii*	[0.0348]*[DBH^2.5893]	kg	81	0.9200		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus greggii*	[−0.177]+[[0.0157]*[[DBH^2]*TH]]	kg	30	0.9662		Coahuila	PF	Aguilar 2009
AGB [S]	Tree	*Pinus greggii*	[−976.02]+[[264.78]*DBH]+[[0.16]*[[DBH^2]*TH]]	g	20	0.9802		Coahuila	CF	Mora 2010
AGB [S]	Tree	*Pinus herrerae*	[0.0348]*[DBH^2.5893]	kg	81	0.9200		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus leiophylla*	[0.1855]*[DBH^2.1017]	kg	27	0.9200		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus oocarpa*	[0.0348]*[DBH^2.5893]	kg	81	0.9200		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus oocarpa*|*Pinus engelmannii*|*Pseudotsuga menziesii*|*Pinus herrerae*	[0.0348]*[DBH^2.5893]	kg	81	0.9200		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pinus patula*	[0.0262]*[DBH^2.6419]	kg	18	0.9600		Oaxaca	POF	Pacheco 2011
AGB [S]	Tree	*Pinus patula*	[Exp[−2.06082]*[DBH^2.30026]]	kg	27	0.9900		Puebla	PF	Castellanos et al. 1996
AGB [S]	Tree	*Pinus pseudostrobus*	[0.007]*[DBH^2.975]	kg	20	0.9200		Guanajuato	CF	Méndez et al. 2011
AGB [S]	Tree	*Pinus teocote*	[0.0274]*[DBH^2.6928]	kg	56	0.9700		Chihuahua, Durango	PF	Návar 2009c
AGB [S]	Tree	*Pithecellobium mangense*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Pseudotsuga menziesii*	[0.0348]*[DBH^2.5893]	kg	21	0.9200		Chihuahua, Durango	PF	Návar 2009c

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [S]	Tree	*Quercus*	[0.0768]*[DBH^2.4416]	kg	118	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [S]	Tree	*Quercus sideroxyla*	[0.0768]*[DBH^2.4416]	kg	51	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [S]	Tree	*Quercus gambelii*	[0.0768]*[DBH^2.4416]	kg	118	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [S]	Tree	*Quercus rugosa*	[0.0768]*[DBH^2.4416]	kg	118	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [S]	Tree	*Rhizophora mangle*	[Exp[−1.9122]*[DBH^2.4120]]	kg	35	0.9300		Campeche	M	Day et al. 1987
AGB [S]	Tree	*Rubus palmeri*	[0.5825]*[DBH^1.6178]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [S]	Tree	*Zanthoxylum kellermanii*	[0.00108]*[DBH^3.7448]	kg	22	0.9800		Oaxaca	ETF	Manzano 2010
AGB [SR]	Tree	*Rhizophora mangle*	[Exp[−4.4565]*[DBH^3.1828]]	kg	35	0.8300		Campeche	M	Day et al. 1987
AGB [WI]	Tree	*Nectandra ambigens*| *Omphalea diandra*| *Myriocarpa longipes*| *Croton schiedeanus*| *Lonchocarpus unifoliolatus*| *Heliocarpus appendiculatus*| *Miconia argentea*| *Poulsenia armata*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Abies religiosa*	[0.0754]*[DBH^2.513]	kg	26	0.9930		Tlaxcala	FF	Avendaño et al. 2009
AGB [WI]	Tree	*Abies religiosa*	[0.031661]*[DBH^2.62221]	kg	250	1.0000		Hidalgo	FF	Rodríguez 2013
AGB [WI]	Tree	*Acacia berlandieri*	[1976.2]*[Vol^1.0101]	kg	15	0.8500	0.1865	Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Acacia cochliacantha*	[Exp[−1.291]*[DBH^2.178]]	kg	8	0.8900		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Acacia cochliacantha*	[0.0841]*[DBH^2.41]	kg	10	0.7900		Sinaloa	TDF	Návar 2009b
AGB [WI]	Tree	*Acacia cochliacantha*| *Conzattia multiflora*| *Euphorbia schlechtendalii*| *Ipomoea arborescens*| *Lysiloma divaricatum*| *Quercus magnoliifolia*	[Exp[−1.527]*[DBH^2.056]]	kg	72	0.7110		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Acacia farnesiana*	[3008.3]*[Vol^1.0646]	kg	15	0.9500	0.0056	Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Acacia rigidula*	[1362.2]*[Vol^0.9347]	kg	15	0.9300	0.0559	Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Albizia caribaea*	[0.054]*[SUM[$D_{0.10}$^2]]*[0.121]	kg	5	0.7000	43.5	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Albizia guachapele*	[0.143]*[SUM[$D_{0.30}$^2]]*[2.0315*TH]	kg	5	0.7900	34.8	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Alnus*	[Exp[−2.14]*[DBH^2.23]]	kg	10	0.9700		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Alnus arguta*	[0.1649]*[DBH^2.2755]	kg	22	0.9677		Hidalgo	TMCF	Acosta et al. 2011
AGB [WI]	Tree	*Alnus firmifolia*	[0.0143]*[DBH^2.8355]	kg	16	0.8795		Estado de México	POF	Juárez 2008
AGB [WI]	Tree	*Alnus glabrata*	[Exp[−2.14]*[DBH^2.23]]	kg	10	0.9700		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Alnus sp.*| *Clethra sp.*| *Inga sp.*| *Liquidambar sp.*| *Quercus sp.*| *Rapanea sp.*	[Exp[−2.194]*[DBH^2.364]]	kg	52	0.9720		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Alnus sp.*| *Clethra sp.*| *Rapanea sp.*	[Exp[−1.969]*[DBH^2.189]]	kg	22	0.9750		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Alseis yucatanensis*	[0.0301]*[DBH^2]*TH	kg	20	0.9100		Quintana Roo	SETF	Cairns et al. 2003

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Alseis yucatanensis*	[0.0867]+[[0.0429]*[DBH^2]*TH]	kg	9	0.9900		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Avicennia germinans*	[Exp[−1.5852]*[DBH^2.3023]]	kg	33	0.9700		Campeche	M	Day et al. 1987
AGB [WI]	Tree	*Bauhinia divaricata*	[0.197575]*[DBH^2.34002]	kg	33	0.9300		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Brosimum alicastrum*	[0.0336]*[DBH^2]*[TH]	kg	17	0.9700		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Brosimum alicastrum*	[0.479403]*[DBH^2.0884]	kg	56	0.9200		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Bucida burseras*	Exp[−1.65869]*[[[DBH^2]*[3.1416/ 4]*[TH]*[WD]]^0.89971]	kg	15	0.9300		Quintana Roo	SETF	Guyot 2011
AGB [WI]	Tree	*Buddleja cordata*	[260.343]*[[3.1416]*[[[[DBH^2]/4]]^1.036]]	g	8	0.9840		Distrito Federal	XS	Cano 1994
AGB [WI]	Tree	*Buddleja cordata*| *Buddleja parviflora*| *Dodonaea viscosa*| *Eysenhardtia polystachya*| *Fraxinus uhdei*| *Wigandia urens*	[258.487]*[[3.1416]*[[[[DBH^2]/4]]^0.968]]	g	47	0.8390		Distrito Federal	XS	Cano 1994
AGB [WI]	Tree	*Buddleja parviflora*	[643.550]*[[3.1416]*[[[[DBH^2]/4]]^0.786]]	g	8	0.9210		Distrito Federal	XS	Cano 1994
AGB [WI]	Tree	*Bursera excelsa*	[10^[−0.8092]*[BA*0.35*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Bursera penicillata*	[0.0841]*[DBH^2.41]	kg	5	0.7900		Sinaloa	TDF	Návar 2009b
AGB [WI]	Tree	*Bursera penicillata*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Bursera penicillata*| *Ceiba acuminata*| *Haematoxylon brasiletto*| *Ipomoea arborescens*| *Pithecellobium mangense*| *Erythrina guatemalensis*| *Guazuma ulmifolia*| *Lysiloma divaricata*| *Rubus palmeri*|	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Bursera penicillata*| *Ceiba acuminata*| *Haematoxylon brasiletto*| *Ipomoea arborescens*| *Pithecellobium mangense*| *Erythrina guatemalensis*| *Guazuma ulmifolia*| *Lysiloma divaricata*| *Rubus palmeri*|	[Exp[−2.523]*[DBH^2.437]]	kg	40	0.8000		Sinaloa	TDF	Návar, 2010aa
AGB [WI]	Tree	*Bursera simaruba*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Bursera simaruba*	[0.064808]*[DBH^2.46998]	kg	43	0.9500		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Bursera simaruba*	Exp[−2.148]*[[[DBH]*[TH]*[WD]]^1.364]	kg	15	0.9230		Quintana Roo	SETF	Guyot 2011
AGB [WI]	Tree	*Caesalpinia*	[10^[−0.8092]*[BA*0.93*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Caesalpinia coriaria*	[10^[−0.8092]*[BA*1.14*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Caesalpinia eriostachys*	[0.085]*[SUM[$D_{0.30}$^2]]*[TH]	kg	5	0.8100	36.9	Nuevo León	TT	Foroughbakhch et al. 2006

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Caesalpinia eriostachys*	[10^[−0.8092]*[BA*0.74*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Caesalpinia sclerocarpa*	[10^[−0.8092]*[BA*1.39*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Caesalpinia velutina*	[0.136]*[SUM[$D_{0.10}$^2]]*[0.015]	kg	5	0.7200	38.1	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Carpinus caroliniana*	[0.109343]*[DBH^2.35954]	kg	75	0.9900		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Carya ovata*	[0.061554]*[DBH^2.53157]	kg	20	0.9800		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Ceanothus caeruleus*	[0.311733]*[DBH^2.04754]	kg	15	0.9700		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Ceiba acuminata*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Ceiba acuminata*	[0.0841]*[DBH^2.41]	kg	5	0.7900		Sinaloa	TDF	Návar 2009b
AGB [WI]	Tree	*Celtis pallida*	[1065.5]*[Vol^0.8949]	kg	15	0.8900	0.1147	Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Cestrum dumetorum*	[0.311733]*[DBH^2.04754]	kg	17	0.9800		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Clethra*	[Exp[−1.90]*[DBH^2.15]]	kg	15	0.9468		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Clethra hartwegii*	[Exp[−1.90]*[DBH^2.15]]	kg	15	0.9468		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Clethra mexicana*	[0.4632]*[DBH^1.8168]	kg	15	0.9460		Hidalgo	TMCF	Acosta et al. 2011
AGB [WI]	Tree	*Clethra pringlei*	[1.16935]*[DBH^1.698]	kg	8	0.9900		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Clethra pringlei*	[0.067833]*[DBH^2.50972]	kg	12	0.9700		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Cochlospermum vitifolium*	[0.0841]*[DBH^2.41]	kg	5	0.7900		Sinaloa	TDF	Návar 2009b
AGB [WI]	Tree	*Coffea arabica*	[Exp[−0.66]*[DBH^1.37]]	kg	10	0.5500		Oaxaca	TMCF	Acosta 2003
AGB [WI]	Tree	*Condalia hookeri*	[1056.8]*[Vol^0.8882]	kg	15	0.8500	0.1921	Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Conzattia multiflora*	[Exp[−3.739]*[DBH^2.819]]	kg	8	0.9900		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Conzattia multiflora|Euphorbia schlechtendalii|Ipomoea arborescens*	[Exp[−3.515]*[DBH^2.562]]	kg	26	0.9080		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Cordia boissieri*	[979.39]*[Vol^0.9171]	kg	15	0.9500	0.0277	Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Cordia elaeagnoides*	[10^[−0.8092]*[BA*0.88*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Crescentia alata*	[0.0327]*[SUM[$D_{0.30}$^2]*TH]	kg	5	0.9400	23.6	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Croton arboreus*	[0.2385]+[[0.0580]*[DBH^2]*TH]	kg	20	0.9900		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Croton lundellii*	[0.1780]+[[0.0638]*[DBH^2]*TH]	kg	10	0.9200		Quintana Roo	SETF	Cairns et al. 2003

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Croton schiedeanus*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Cupressus lindleyi*	[0.5266]*[DBH^1.7712]	kg	18	0.9305		Estado de México	PF	Vigil 2010
AGB [WI]	Tree	*Dendropanax arboreus*	[0.037241*DBH^2.99585]	kg	10	0.9500		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Diospyros texana*	[1649.5]*[Vol^0.9710]	kg	15	0.9400		Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Dodonaea viscosa*	[450.789]*[[3.1416]*[[[[DBH^2]/4]]^0.941]]	g	8	0.9180		Distrito Federal	XS	Cano 1994
AGB [WI]	Tree	*Enterolobium cyclocarpum*	[0.0207]*[SUM[$D_{0.30}$^2]]*TH	kg	5	0.9600	20.3	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Erythrina guatemalensis*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Esenbeckia berlandieri*	[10^[−0.8092]*[BA*0.93*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	Wet species communities	[WD]*[Exp[[−1.239]+[1.98*ln[DBH]]+ [[0.207*ln[DBH]^2]+[−0.0281*ln[DBH]^3]]]	kg	415	0.9500		Yucatán		Chave et al. 2005
AGB [WI]	Tree	*Eugenia*	[0.4600]+[[0.0370]*[DBH^2]*TH]	kg	7	0.9900		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Euphorbia schlechtendalii*	[Exp[−3.101]*[DBH^2.333]]	kg	8	0.8800		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Eysenhardtia polystachya*	[362.129]*[[3.1416]*[[[[DBH^2]/4]]^0.796]]	g	11	0.8820		Distrito Federal	XS	Cano 1994
AGB [WI]	Tree	*Eysenhardtia texana*	[703.71]*[Vol^0.8605]	kg	15	0.8800	0.0339	Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Ficus*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000]	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Ficus*	[0.027059]*[DBH^2.86357]	kg	143	0.9500		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Fraxinus uhdei*	[362.129]*[[3.1416]*[[[[DBH^2]/4]]^1.100]]	g	4	0.9660		Distrito Federal	XS	Cano 1994
AGB [WI]	Tree	*Gliricidia sepium*	[0.1185]*[SUM[$D_{0.30}$^2]]	kg	5	0.9900	16.7	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Guazuma ulmifolia*	[Exp[−1.6200]*[DBH^2.1200]]	kg	25	0.9700		Chiapas	ETF	Douterlungne et al. 2013
AGB [WI]	Tree	*Guazuma ulmifolia*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Guazuma ulmifolia*	[0.232435]*[DBH^2.21906]	kg	105	0.9800		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Guettarda elliptica*	[10^[−0.8092]*[BA*0.97*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Haematoxylon brasiletto*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Haematoxylon brasiletto*	[0.1124]*[SUM[$D_{0.30}$^2]]	kg	5	0.9500	22.5	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Harpalyce arborescensis*	[0.401524]*[DBH^1.83808]	kg	16	0.9200		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Helietta parvifolia*	[1205.6]*[Vol^0.925]	kg	15	0.8300	0.0536	Nuevo León	TT	Návar et al. 2001

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Heliocarpus appendiculatus*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Heliocarpus pallidus*	[10^[−0.8092]*[BA*0.69*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Hevea brasiliensis*	[Exp[−3.1426]*[DBH^2.69273]]	kg	28	0.9860		Oaxaca	CF	Rojo et al., 2005
AGB [WI]	Tree	*Hevea brasiliensis*	[0.36]*[DBH^2.089]	kg	20	0.8600		Veracruz	CF	Monroy and Návar 2004
AGB [WI]	Tree	*Hevea brasiliensis*	[13.50436]+[[0.0199091]*[[DBH^2]*[TH]]]	kg	20	0.8300		Veracruz	CF	Monroy and Návar 2004
AGB [WI]	Tree	*Inga*	[Exp[−1.76]*[DBH^2.26]]	kg	12	0.9700		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Inga vera*	[Exp[−1.76]*[DBH^2.26]]	kg	12	0.9700		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Inga vera*	[Exp[−4.0400]*[DBH^4.0000]*[[DBH^−0.2900]^2]]	kg	22	0.9700		Chiapas	ETF	Douterlungne et al. 2013
AGB [WI]	Tree	*Ipomoea arborescens*	[Exp[−4.005]*[DBH^2.653]]	kg	8	0.9300		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Ipomoea arborescens*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Ipomoea wolcottiana*	[10^[−0.8092]*[BA*0.57*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Jatropha angustifolia*	[0.0841]*[DBH^2.41]	kg	5	0.7900		Sinaloa	TDF	Návar 2009b
AGB [WI]	Tree	*Jatropha malacophylla*	[10^[−0.8092]*[BA*0.26*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Juniperus flaccida*	[0.209142]*[DBH^1.698]	kg	256	0.9700		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Juniperus flaccida*	[Exp[−1.6469]*[DBH^2.1255]]	kg	8	0.9900		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Juniperus flaccida*| *Pinus pseudostrobus*| *Quercus cambyi*| *Quercus laceyi*| *Quercus rysophylla*	[Exp[−2.3739]*[DBH^2.4154]]	kg	39	0.9600		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Laguncularia racemosa*	[Exp[−1.5919]*[DBH^2.1924]]	kg	34	0.9700		Campeche	M	Day et al. 1987
AGB [WI]	Tree	*Liquidambar*	[Exp[−2.22]*[DBH^2.45]]	kg	10	0.9900		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Liquidambar macrophylla*	[Exp[−2.22]*[DBH^2.45]]	kg	10	0.9900		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Liquidambar styraciflua*	[0.180272]*[DBH^2.27177]	kg	74	0.9600		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Lonchocarpus*	[10^[−0.8092]*[BA*0.6521*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Lonchocarpus constrictus*	[10^[−0.8092]*[BA*0.93*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Lonchocarpus lanceolatus*	[10^[−0.8092]*[BA*0.6521*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Lonchocarpus unifoliolatus*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Lysiloma divaricatum*	[Exp[−1.852]*[DBH^2.378]]	kg	8	0.9900		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Lysiloma divaricatum*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Lysiloma divaricatum*	[0.0841]*[DBH^2.41]	kg	10	0.7900		Sinaloa	TDF	Návar 2009b
AGB [WI]	Tree	*Lysiloma latisiliquum*	Exp[−2.148]*[[[DBH]*[TH]*[WD]]^1.364]	kg	15	0.9230		Quintana Roo	SETF	Guyot 2011
AGB [WI]	Tree	*Lysiloma microphylla*	[10^[−0.8092]*[BA*0.92*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Manilkara zapota*	[0.0447]*[DBH^2]*[TH]	kg	20	0.9800		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Manilkara zapota*	[0.0034]+[[0.0482]*[DBH^2]*[TH]]	kg	16	0.8900		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Metopium brownei*	Exp[−2.148]*[[[DBH]*[TH]*[WD]]^1.364]	kg	15	0.9230		Quintana Roo	SETF	Guyot 2011
AGB [WI]	Tree	*Miconia argentea*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Mimosa albida*	[0.23855*DBH^1.92242]	kg	44	0.9600		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Mirandaceltis monoica*	[0.062394]*[DBH^2.71448]	kg	16	0.9500		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Myriocarpa longipes*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Myrospermum frutescens*	[0.624]*[DBH^2]	kg	5	0.9800		Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Nectandra ambigens*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Nectandra sanguinea*	[0.004038]*[DBH^3.35693]	kg	20	0.9500		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Nicotiana glauca*	[0.182197]*[DBH^2.22818]	kg	24	0.9500		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Ochroma pyramidale*	[Exp[−2.4500]*[DBH^2.3000]]	kg	32	0.9000		Chiapas	ETF	Douterlungne et al. 2013
AGB [WI]	Tree	*Omphalea oleifera*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	Other species of POF	[1.3169*DBH^1.7108]	kg		0.9600		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Phoebe tampicensis*	[0.222776]*[DBH^2.33953]	kg	24	0.9700		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Pinus*	[0.058]*[[[DBH^2]*TH]^0.919]	kg	80	0.9700		Chiapas	POF	Ayala 1998

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Pinus*	[0.084]*[DBH^2.475]	kg	80	0.9720		Chiapas	POF	Ayala et al. 2001
AGB [WI]	Tree	*Pinus*	[1.2244]+[[0.01298]*[[$D_{0.0}$^2]*TH]]	kg	56	0.8900		Durango	PF	González 2001
AGB [WI]	Tree	*Pinus*	[Exp[−3.139]*[DBH^2.585]]	kg	56	0.8300		Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus*	[Exp[−2.818]*[DBH^2.574]]	kg	520	0.9400		Chihuahua, Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus*	[0.1229]*[DBH^2.3964]	kg	81	0.9100		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Pinus*	[14.81]+[[2.585*$D_{0.0}$]]+[−2.82*[ln[TH]]]+ [−14.7*[ln[$D_{0.0}$]]]+[[0.009]*[[$D_{0.0}$^2]*[TH]]]	kg	56	0.8600		Durango	CF	Návar et al. 2004b
AGB [WI]	Tree	*Pinus arizonica*	[Exp[−1.482]*[DBH^2.129]]]	kg	30	0.8400	0.1697	Chihuahua	PF	Návar 2010a
AGB [WI]	Tree	*Pinus arizonica*	[Exp[−3.573]*[DBH^2.746]]]	kg	36	0.9600	0.0897	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus arizonica*	[Exp[[−0.877]*[DBH^1.98]]]	kg	60	0.8100	0.0560	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus arizonica*	[0.0819]*[DBH^2.4293]	kg	66	0.9700		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Pinus ayacahuite*	[0.058]*[[[DBH^2]*TH]^0.919]	kg	1	0.9700		Chiapas	POF	Ayala 1998
AGB [WI]	Tree	*Pinus ayacahuite*	[Exp[−3.066]*[DBH^2.646]]]	kg	45	0.9700	0.0440	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus ayacahuite*	[0.2893]*[DBH^2.1569]	kg	58	0.9700		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Pinus cembroides*	[Exp[0.9173]*[DBH^1.0730]]	kg	30	0.4467		Zacatecas	DS	Guerrero 2013
AGB [WI]	Tree	*Pinus cooperi*	[0.2018]*[DBH^2.2907]	kg	49	0.9400		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Pinus cooperi*	[Exp[−1.922]*[DBH^2.321]]]	kg	20	0.9300	0.1596	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus cooperi*	[Exp[−3.264]*[DBH^2.707]]]	kg	12	0.9000	2.7400	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus cooperi*	[14.81]+[[2.585*[ln[$D_{0.0}$^2]]*[TH]]]+ [[−2.82*[ln[$D_{0.0}$]]]]+[[−14.7]*[$D_{0.0}$]]+ [[0.009]*[ln[$D_{0.0}$^2]]*[TH]]	kg	19	0.9400		Durango	CF	Návar et al. 2004b
AGB [WI]	Tree	*Pinus cooperi*	[22.3476]+[[4.9470]*DBH]+[0.4911*[DBH^2]]+ [0.0039*[[DBH^2]*TH]]	kg		0.9600		Durango	POF	Pimienta et al. 2007
AGB [WI]	Tree	*Pinus devoniana*	[0.182]*[DBH^1.936]	kg	20	0.8500		Guanajuato	CF	Méndez et al. 2011
AGB [WI]	Tree	*Pinus durangensis*	[8.9546]*[DBH^2.9123]	g	72	0.8424		Durango	PF	Montes de Oca et al. 2009
AGB [WI]	Tree	*Pinus durangensis*	[0.1382]*[DBH^2.3573]	kg	384	0.9100		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Pinus durangensis*	[Exp[−3.532]*[DBH^2.731]]]	kg	30	0.9200	0.1478	Chihuahua	PF	Návar 2010a
AGB [WI]	Tree	*Pinus durangensis*	[Exp[−3.416]*[DBH^2.715]]]	kg	15	0.9600	0.1405	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus durangensis*	[Exp[−2.084]*[DBH^2.323]]]	kg	71	0.9400	0.0740	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus durangensis*	[Exp[−2.108]*[DBH^2.373]]	kg	60	0.9600	0.0190	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus durangensis*	[14.81]+[[2.585*$D_{0.0}$]]+[−2.82*[ln[$D_{0.0}$^2]*[TH]]]+ [−14.7*[ln[$D_{0.0}$^2]*[TH]]]	kg	25	0.8900		Durango	CF	Návar et al. 2004b
AGB [WI]	Tree	*Pinus engelmannii*	[0.1354]*[DBH^2.3033]	kg	81	0.9400		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Pinus engelmannii*	[14.81]+[[2.585*$D_{0.0}$]]+[−2.82*[ln[$D_{0.0}$^2]*[TH]]]+ [−14.7*[[$D_{0.0}$^2]*[TH]]]	kg	12	0.8800		Durango	CF	Návar et al. 2004b
AGB [WI]	Tree	*Pinus greggii*	[[6426.6]*[[DBH^2]*TH]^2]+[291.42*[[DBH^2]*TH]]	kg	20	0.8865		Hidalgo	CF	Pacheco et al. 2007

Table 7 (continued)

<table>
<tr><th>Stock [component]</th><th>Life form</th><th>Genus | Species | Species group vegetation</th><th>Equation</th><th>Unit of measure</th><th>Sample</th><th>r2</th><th>SE</th><th>State of Mexico</th><th>Vegetation type associated</th><th>Reference</th></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus greggii</td><td>[−3.193]+[[0.0256]*[[DBH^2]*TH]]</td><td>kg</td><td>30</td><td>0.9923</td><td></td><td>Coahuila</td><td>PF</td><td>Aguilar 2009</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus greggii</td><td>[29607]+[[−293.44]*[DBH^2]]+[[−46.21]*TH]+ [0.75*[[DBH^2]*TH]]</td><td>g</td><td>20</td><td>0.9669</td><td></td><td>Coahuila</td><td>CF</td><td>Mora 2010</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus hartwegii</td><td>[0.0635]*[DBH^2.4725]</td><td>kg</td><td>29</td><td>0.9870</td><td></td><td>Estado de México</td><td>PF</td><td>Jímenez, 2010</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus herrerae</td><td>[0.1354]*[DBH^2.3033]</td><td>kg</td><td>81</td><td>0.9400</td><td></td><td>Chihuahua, Durango</td><td>PF</td><td>Návar 2009c</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus leiophylla</td><td>[Exp[−3.039]*[DBH^2.523]]]</td><td>kg</td><td>12</td><td>0.9200</td><td>0.2237</td><td>Durango</td><td>PF</td><td>Návar 2010a</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus leiophylla</td><td>[Exp[−3.549]*[DBH^2.787]]]</td><td>kg</td><td>15</td><td>0.9400</td><td>0.0650</td><td>Durango</td><td>PF</td><td>Návar 2010a</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus leiophylla</td><td>[0.1751]*[DBH^2.2629]</td><td>kg</td><td>27</td><td>0.9300</td><td></td><td>Chihuahua, Durango</td><td>PF</td><td>Návar 2009c</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus maximinoi</td><td>[0.3780]*[DBH^2.1064]</td><td>kg</td><td>92</td><td>0.9500</td><td></td><td>Chiapas</td><td>POF</td><td>González 2008</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus montezumae</td><td>[0.058]*[[[DBH^2]*TH]^0.919]</td><td>kg</td><td>6</td><td>0.9700</td><td></td><td>Chiapas</td><td>POF</td><td>Ayala 1998</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus montezumae</td><td>[0.013]*[DBH^3.046]</td><td>kg</td><td>15</td><td>0.9900</td><td></td><td>Estado de México</td><td>PF</td><td>Bonilla 2009</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus montezumae</td><td>[1.30454]*[DBH^1.73099]</td><td>kg</td><td>19</td><td>0.9900</td><td></td><td>Tamaulipas</td><td>POF</td><td>Rodríguez et al. 2009</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus oaxacana</td><td>[0.058]*[[[DBH^2]*TH]^0.919]</td><td>kg</td><td>5</td><td>0.9700</td><td></td><td>Chiapas</td><td>POF</td><td>Ayala 1998</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus oocarpa</td><td>[0.058]*[[[DBH^2]*TH]^0.919]</td><td>kg</td><td>17</td><td>0.9700</td><td></td><td>Chiapas</td><td>POF</td><td>Ayala 1998</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus oocarpa</td><td>[[−10.4113]+[5.3998]]*[DBH+[0.8144]]*[DBH^2]</td><td>kg</td><td>91</td><td>0.9500</td><td></td><td>Chiapas</td><td>POF</td><td>González 2008</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus oocarpa</td><td>[0.1354]*[DBH^2.3033]</td><td>kg</td><td>81</td><td>0.9400</td><td></td><td>Chihuahua, Durango</td><td>PF</td><td>Návar 2009c</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus oocarpa</td><td>[Exp[−3.065]*[DBH^2.625]]]</td><td>kg</td><td>31</td><td>0.9300</td><td>0.0610</td><td>Durango</td><td>PF</td><td>Návar 2010a</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus oocarpa| Pinus engelmannii| Pseudotsuga menziesii| Pinus herrerae</td><td>[0.1354]*[DBH^2.3033]</td><td>kg</td><td>81</td><td>0.9400</td><td></td><td>Chihuahua, Durango</td><td>PF</td><td>Návar 2009c</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus patula</td><td>[0.0514]*[DBH^2.5222]</td><td>kg</td><td>18</td><td>0.9827</td><td></td><td>Oaxaca</td><td>POF</td><td>Pacheco 2011</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus patula</td><td>[Exp[−1.8621]*[DBH^2.27675]]</td><td>kg</td><td>27</td><td>0.9900</td><td></td><td>Puebla</td><td>PF</td><td>Castellanos et al. 1996</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus patula</td><td>[0.0948]*[DBH^2.4079]</td><td>kg</td><td>25</td><td>0.9900</td><td></td><td>Tlaxcala</td><td>PF</td><td>Díaz 2005</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus patula</td><td>[5.338]+[[18.634]*[DBH^2]]*[TH]</td><td>kg</td><td>18</td><td>0.9740</td><td></td><td>Hidalgo</td><td>POF</td><td>Figueroa et al. 2010</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus patula</td><td>[0.407073]*[DBH^2.02617]</td><td>kg</td><td>111</td><td>0.9800</td><td></td><td>Tamaulipas</td><td>POF</td><td>Rodríguez et al. 2009</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus patula</td><td>[0.0019]*[[DBH*TH]^1.98]</td><td>kg</td><td>30</td><td>0.8700</td><td></td><td>Oaxaca</td><td>CF</td><td>Rodríguez et al. 2012</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus patula</td><td>[0.0357]*[DBH^2.6916]</td><td>kg</td><td>25</td><td>0.9828</td><td></td><td>Tlaxcala</td><td>PF</td><td>Díaz et al. 2007</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus pinceana</td><td>[−1.8492]*[DBH^2.0374]</td><td>kg</td><td>40</td><td>0.6700</td><td></td><td>Zacatecas</td><td>DS</td><td>Jiménez 2013</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus pseudostrobus</td><td>[0.35179]*[DBH^2]</td><td>kg</td><td></td><td>0.9410</td><td>0.031</td><td>Nuevo León</td><td>PF</td><td>Aguirre et al., 2011</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus pseudostrobus</td><td>[2354.14*Exp[−57.453/DBH]+1.3]</td><td>kg</td><td></td><td></td><td></td><td>Nuevo León</td><td>PF</td><td>Aguirre et al. 2007</td></tr>
<tr><td>AGB [WI]</td><td>Tree</td><td>Pinus pseudostrobus</td><td>[0.058]*[[[DBH^2]*TH]^0.919]</td><td>kg</td><td>14</td><td>0.9700</td><td></td><td>Chiapas</td><td>POF</td><td>Ayala 1998</td></tr>
</table>

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Pinus pseudostrobus*	[0.537]*[DBH^1.882]	kg	8	0.8900		Nuevo León	POF	Domínguez 2005
AGB [WI]	Tree	*Pinus pseudostrobus*	[2354.14]*[Exp[[−57.453]/DBH]]]+1.3	kg	8	0.9200		Nuevo León	POF	Domínguez et al. 2009
AGB [WI]	Tree	*Pinus pseudostrobus*	[0.003]*[DBH^3.383]	kg	20	0.9000		Guanajuato	CF	Méndez et al.,2011
AGB [WI]	Tree	*Pinus pseudostrobus*	[Exp[−2.611]*[DBH^2.531]]]	kg	24	0.8800	0.0470	Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus pseudostrobus*	[7027]*[DBH^2.1924]	kg	20	0.8600		Estado de México	PF	Palma 2011
AGB [WI]	Tree	*Pinus pseudostrobus*	[0.128495]*[DBH^2.36444]	kg	208	0.9900		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Pinus pseudostrobus*	[Exp[−3.1641]*[DBH^2.5996]]	kg	8	0.9800		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Pinus pseudostrobus*| *Quercus rysophylla*	[Exp[−2.8164]*[DBH^2.5282]]	kg	16	0.9700		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Pinus teocote*	[0.40196]*[DBH^2]	kg		0.9480	0.0332	Nuevo León	PF	Aguirre and Jiménez 2011
AGB [WI]	Tree	*Pinus teocote*	[2543.055]*[Exp[−56.209/DBH]+1.3]	kg				Nuevo León	PF	Aguirre et al. 2007
AGB [WI]	Tree	*Pinus teocote*	[0.508]*[DBH^1.933]	kg	8	0.9000		Nuevo León	POF	Domínguez 2005
AGB [WI]	Tree	*Pinus teocote*	[2543.05]*[Exp[[−56.209/DBH]]]+1.3	kg	8	0.9300		Nuevo León	POF	Domínguez et al. 2009
AGB [WI]	Tree	*Pinus teocote*	[Exp[−3.182]*[DBH^2.702]]]	kg	49	0.9600		Durango	PF	Návar 2010a
AGB [WI]	Tree	*Pinus teocote*	[0.032495]*[DBH^2.76658]	kg	209	0.9900		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Pinus teocote*	[0.2057]*[DBH^2.2583]	kg	56	0.9600		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Piper*	[0.3627]+[[0.0322]*[DBH^2]*TH]	kg	64	0.7200		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Piper*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Piscidia piscipula*	[0.064066]*[DBH^2.62323]	kg	30	0.9500		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Pithecellobium dulce*	[0.312]*[SUM[$D_{0.30}$^2]]	kg	5	0.9200	37.4	Nuevo León	TT	Foroughbakhch et al. 2006
AGB [WI]	Tree	*Pithecellobium mangense*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Pithecellobium pallens*	[1361.3]*[Vol^1.0023]	kg	15	0.9200		Nuevo León	TT	Návar et al. 2001
AGB [WI]	Tree	*Podocarpus reichei*	[0.132107]*[DBH^2.22170]	kg	103	0.9300		Tamaulipas	TMCF	Rodríguez et al. 2007
AGB [WI]	Tree	*Poulsenia armata*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Pouteria campechiana*	[0.0358]*[DBH^2]*[TH]	kg	11	0.9400		Quintana Roo	SETF	Cairns et al. 2003

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Pouteria unilocularis*	[0.0465]*[DBH^2]*[TH]	kg	27	0.9600		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Pouteria unilocularis*	[0.8322]+[[0.0429]*[DBH^2]*TH]	kg	59	0.9500		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Prosopis articulata*	[[2.618]*[ln[BP]]]+[5.802]	kg	6	0.9800		Baja California Sur	MS	León et al. 2005
AGB [WI]	Tree	*Prosopis laevigata*	[−0.9538]*[$D_{0.0}$^2.0457]	kg	30	0.8600		Zacatecas	DS	Jiménez 2013
AGB [WI]	Tree	*Prosopis palmeri*	[Exp[[0.797]+[[3.1416]*[RC1]*[RC2]*[0.177]]]	kg	6	0.9400		Baja California Sur	MS	León et al. 2005
AGB [WI]	Tree	*Prunus persica*	[Exp[−2.76]*[DBH^2.37]]	kg	11	0.9500		Oaxaca	TMCF	Acosta 2003
AGB [WI]	Tree	*Pseudolmedia oxyphyllaria*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Pseudotsuga menziesii*	[0.1354]*[DBH^2.3033]	kg	21	0.9400		Chihuahua, Durango	PF	Návar 2009c
AGB [WI]	Tree	*Psidium guajava*	[1.7737]*[DBH^1.2282]	kg	18	0.8800		Aguascalientes	CF	Meraz et al. 2013
AGB [WI]	Tree	*Psidium guajava*	[0.246689]*[DBH^2.24992]	kg	18	0.9900		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Quercus*	[0.0342]*[DBH^2.7590]	kg	135	0.9300		Michoacán	OF	Aguilar et al. 2012
AGB [WI]	Tree	*Quercus*	[0.45534]*[DBH^2]	kg		0.9470	0.0268	Nuevo León	OPF	Aguirre and Jiménez 2011
AGB [WI]	Tree	*Quercus*	[4371.395]*[Exp][−70.972/DBH]]]+1.3]	kg				Nuevo León	OPF	Aguirre et al. 2007
AGB [WI]	Tree	*Quercus*	[0.092]*[DBH^2.448]	kg	16	0.9000		Nuevo León	POF	Domínguez 2005
AGB [WI]	Tree	*Quercus*	[4371.4]*[Exp[[−70.972/DBH]]]+1.3]	kg	16	0.8900		Nuevo León	POF	Domínguez et al. 2009
AGB [WI]	Tree	*Quercus*	[0.1269]*[DBH^2.5169]	kg	44			Chiapas	POF	González 2008
AGB [WI]	Tree	*Quercus*	[0.0890]*[DBH^2.5226]	kg	118	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [WI]	Tree	*Quercus*	[Exp[−2.144]*[DBH^2.403]]]	kg	45	0.8900	0.1275	Chihuahua	OPF	Návar 2010a
AGB [WI]	Tree	*Quercus*	[Exp[−2.754]*[DBH^2.574]]]	kg	17	0.9400	0.0890	Durango	OPF	Návar 2010a
AGB [WI]	Tree	*Quercus*	[Exp[−2.874]*[DBH^2.631]]]	kg	106	0.9300	0.0780	Chihuahua, Durango	OPF	Návar 2010a
AGB [WI]	Tree	*Quercus*	[0.038424*DBH^2.82139]	kg	19	0.9700		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Quercus*	[Exp[−2.27]*[DBH^2.39]]	kg	8	0.9900		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Quercus*	[0.283]*[[[DBH^2]*TH]^0.807]	kg	50	0.9540		Chiapas	POF	Ayala 1998
AGB [WI]	Tree	*Quercus*	[0.010702]*[DBH^3.05082]	kg	57	0.9700		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Quercus cambyi*	[Exp[−2.3112]*[DBH^2.4497]]	kg	8	0.9700		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Quercus sideroxyla*	[0.0890]*[DBH^2.5226]	kg	51	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [WI]	Tree	*Quercus canbyi*	[0.092]*[DBH^2.448]	kg	4	0.9000		Nuevo León	POF	Domínguez 2005
AGB [WI]	Tree	*Quercus castanea*	[0.0416]*[DBH^2.7154]	kg	118	0.9700		Michoacán	OF	

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
										Aguilar et al. 2012
AGB [WI]	Tree	*Quercus crassifolia*	[0.283]*[[[DBH^2]*TH]^0.807]	kg	7	0.9540		Chiapas	POF	Ayala 1998
AGB [WI]	Tree	*Quercus crispipilis*	[0.283]*[[[DBH^2]*TH]^0.807]	kg	11	0.9540		Chiapas	POF	Ayala 1998
AGB [WI]	Tree	*Quercus gambelii*	[0.0890]*[DBH^2.5226]	kg	118	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [WI]	Tree	*Quercus germana*	[0.892617]*[DBH^1.84697]	kg	28	0.9500		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Quercus laceyi*	[0.092]*[DBH^2.448]	kg	4	0.9000		Nuevo León	POF	Domínguez 2005
AGB [WI]	Tree	*Quercus laceyi*	[Exp[−2.4344]*[DBH^2.5069]]	kg	7	0.9800		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Quercus laceyi*| *Quercus cambyi*	[Exp[−2.3517]*[DBH^2.4700]]	kg	15	0.9800		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Quercus laeta*	[0.0333]*[DBH^2.6648]	kg	17	0.9200		Michoacán	OF	Aguilar et al. 2012
AGB [WI]	Tree	*Quercus laurina*	[0.283]*[[[DBH^2]*TH]^0.807]	kg	17	0.9540		Chiapas	POF	Ayala 1998
AGB [WI]	Tree	*Quercus laurina*	[0.0406]*[DBH^2.7339]	kg	14	0.9622		Estado de México	OF	Tomas 2013
AGB [WI]	Tree	*Quercus magnoliifolia*	[Exp[−3.369]*[DBH^2.934]]	kg	12	0.9800		Morelos	OF	Gómez 2008
AGB [WI]	Tree	*Quercus magnoliifolia*	[0.0345]*[DBH^2.9334]	kg	12	0.9800		Morelos	OF	Gomez et al., 2011
AGB [WI]	Tree	*Quercus magnoliifolia*| *Lysiloma divaricatum*| *Acacia cochliacantha*|	[Exp[−1.566]*[DBH^2.276]]	kg	46	0.9420		Morelos	TDF	Gómez 2008
AGB [WI]	Tree	*Quercus peduncularis*	[Exp[−2.27]*[DBH^2.39]]	kg	8	0.9900		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Quercus polymorpha*	[0.092]*[DBH^2.448]	kg	4	0.9000		Nuevo León	POF	Domínguez 2005
AGB [WI]	Tree	*Quercus rugosa*	[0.283]*[[[DBH^2]*TH]^0.807]	kg	7	0.9540		Chiapas	POF	Ayala 1998
AGB [WI]	Tree	*Quercus rugosa*	[0.0890]*[DBH^2.5226]	kg	118	0.9500		Chihuahua, Durango	OPF	Návar 2009c
AGB [WI]	Tree	*Quercus rugosa*	[0.0402]*[DBH^2.757]	kg	12	0.9789		Estado de México	OF	Tomas 2013
AGB [WI]	Tree	*Quercus rysophylla*	[0.092]*[DBH^2.448]	kg	4	0.9000		Nuevo León	POF	Domínguez 2005
AGB [WI]	Tree	*Quercus rysophylla*	[0.266424]*[DBH^2.02768]	kg	8	0.9700		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Quercus rysophylla*	[Exp[−2.2089]*[DBH^2.3736]]	kg	8	0.9700		Nuevo León	OPF	Rodríguez et al. 2007
AGB [WI]	Tree	*Quercus rysophylla*	[0.970526]*[DBH^1.83733]	kg	25	0.9600		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Quercus sartorii*	[0.221123]*[DBH^2.20188]	kg	143	0.9500		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Quercus segoviensis*	[0.283]*[[[DBH^2]*TH]^0.807]	kg	2	0.9540		Chiapas	POF	Ayala 1998
AGB [WI]	Tree	*Quercus sideroxyla*	[Exp[−2.592]*[DBH^2.585]]]	kg	30	0.9500	0.1093	Durango	OPF	Návar 2010a
AGB [WI]	Tree	*Quercus sp.*| *Inga sp.*| *Liquidambar sp.*	[Exp[−2.193]*[DBH^2.412]]	kg	30	0.9860		Oaxaca	TMCF	Acosta et al. 2002

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Quercus xalapensis*	[0.308451]*[DBH^2.13230]	kg	143	0.9800		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Quercus xalapensis*	[0.766406]*[DBH^1.93843]	kg	33	0.9800		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Rapanea*	[Exp[−1.99]*[DBH^2.26]]	kg	6	0.9900		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Rapanea myricoides*	[Exp[−1.99]*[DBH^2.26]]	kg	6	0.9900		Oaxaca	TMCF	Acosta et al. 2002
AGB [WI]	Tree	*Rhizophora mangle*	[Exp[−1.5605]*[DBH^2.5072]]	kg	35	0.9400		Campeche	M	Day et al. 1987
AGB [WI]	Tree	*Robinsonella discolor*	[0.23736]*[DBH^2.16175]	kg	24	0.9900	Tamaulipas	TDF	Rodríguez et al. 2008	
AGB [WI]	Tree	*Rollinia*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Rubus palmeri*	[0.3700]*[DBH^1.9600]	kg	39	0.8500		Sinaloa	TDF	Návar 2009c
AGB [WI]	Tree	*Sargentia greggii*	[0.078545*DBH^2.58952]	kg	11	0.9700		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Talisia olivaeformis*	[0.0493]+[[0.0480]*[DBH^2]*[TH]]	kg	24	0.9800		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Ternstroemia sylvatica*	[0.132193]*[DBH^2.49568]	kg	15	0.9900		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Ternstroemia sylvatica*	[0.035689]*[DBH^2.56487]	kg	143	0.9500		Tamaulipas	TMCF	Rodríguez et al., 2006
AGB [WI]	Tree	*Thouinia paucidentata*	[10^[−0.8092]*[BA*0.98*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992
AGB [WI]	Tree	*Tilia houghii*	[0.048454*DBH^2.58164]	kg	10	0.9900		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Trichilia havanensis*	[0.130169]*[DBH^2.34924]	kg	20	0.9900		Tamaulipas	TDF	Rodríguez et al. 2008
AGB [WI]	Tree	*Trichilia minutiflora*	[0.0465]*[DBH^2]*[TH]	kg	37	0.9700		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Trichilia minutiflora*	[0.4125]+[[0.0421]*[DBH^2]*TH]	kg	170	0.9600		Quintana Roo	SETF	Cairns et al. 2003
AGB [WI]	Tree	*Trichospermum mexicanun*	[Exp[−2.8200]*[DBH^2.4200]]	kg	24	0.9600		Chiapas	ETF	Douterlungne et al. 2013
AGB [WI]	Tree	*Trichospermum mexicanun*	[[Exp[4.9375]]*[[DBH^2]^1.0583]]*[1.14]/ 1000000	Mg	66	0.9300		Veracruz	ETF	Hughes et al. 1999
AGB [WI]	Tree	*Wigandia urens*	[59.979]*[[3.1416]*[[[[DBH^2]/4]]^1.319]]	g	8	0.8560		Distrito Federal	XS	Cano 1994
AGB [WI]	Tree	*Wimmeria concolor*	[0.346847]*[DBH^1.99059]	kg	24	0.9700		Tamaulipas	POF	Rodríguez et al. 2009
AGB [WI]	Tree	*Yucca filifera*	[[−40.102]+[1.787]]*[[DBH]+[10.182]]*[TH]	kg	31	0.9600	10.13	Zacatecas	DS	Castañuela 2013
AGB [WI]	Tree	*Zanthoxylum fagara*	[10^[−0.8092]*[BA*0.85*TH]^[0.8247]]	kg	214	0.9500		Jalisco	TDF	Martínez-Yrizar et al. 1992

Table 7 (continued)

Stock [component]	Life form	Genus | Species | Species group vegetation	Equation	Unit of measure	Sample	r2	SE	State of Mexico	Vegetation type associated	Reference
AGB [WI]	Tree	*Zanthoxylum kellermanii*	[0.00166]*[DBH^3.6586]	kg	22	0.9900		Oaxaca	ETF	Manzano 2010
BGB [R]	Tree	Trees of TT	[0.14]*[$D_{0.0}$^1.5588]	kg	20	0.5000		Nuevo León	TT	De los Rios and Návar 2010
BGB [R]	Tree	*Eucalyptus*	[0.4037]^[DBH*0.1766]	kg	6	0.7787		Oaxaca	CF	Toribio 2006
BGB [R]	Tree	*Eucalyptus*	[2.497]^[DBH*0.1186]	kg	6	0.9598		Oaxaca	CF	Toribio 2006
BGB [R]	Tree	*Pinus*	[0.0005]*[$D_{0.0}$^3.92]	kg	20	0.7700		Nuevo León	PF	De los Ríos and Návar 2010a
BGB [R]	Tree	*Pinus*	[0.0202]*[DBH^2.6480]	kg	721	0.9400		Chihuahua, Durango	PF	Návar 2009c
CC [WI]	Tree	*Abies religiosa*	[0.035]*[DBH^2.513]	kg	26	0.993		Tlaxcala	FF	Avendaño et al. 2009
CC [WI]	Tree	*Alnus arguta*	[0.0809]*[DBH^2.2782]	kg	22	0.9680		Hidalgo	TMCF	Acosta et al. 2011
CC [WI]	Tree	*Alnus firmifolia*	[0.009]*[DBH^2.7517]	kg	16	0.9313		Estado de México	POF	Juárez 2008
CC [WI]	Tree	*Clethra mexicana*	[0.2249]*[DBH^1.8168]	kg	15	0.9463		Hidalgo	TMCF	Acosta et al. 2011
CC [WI]	Tree	*Cupressus lindleyi*	[0.2637]*[DBH^1.7698]	kg	18	0.9312		Estado de México	PF	Vigil 2010
CC [WI]	Tree	*Pinus cooperi*	[11.509]+[[−3.1229]*DBH]+[0.31*[DBH^2]]+ [0.0004*[[DBH^2]*TH]]	kg		0.9900		Durango	POF	Pimienta et al. 2007
CC [WI]	Tree	*Pinus greggii*	[[3887.7]*[[DBH^2]*TH]^2]+ [147.36*[[DBH^2]*TH]]	kg	20	0.8850		Hidalgo	CF	Pacheco et al. 2007
CC [WI]	Tree	*Pinus hartwegii*	[0.0309]*[DBH^2.4722]	kg	29	0.9870		Estado de México	PF	Jiménez 2010
CC [WI]	Tree	*Pinus montezumae*	[0.006]*[DBH^3.038]	kg	15	0.990		Estado de México	PF	Bonilla 2009
CC [WI]	Tree	*Pinus patula*	[0.0485]*[DBH^2.3988]	kg	25	0.9900		Tlaxcala	PF	Díaz 2005
CC [WI]	Tree	*Pinus patula*	[0.021]*[DBH^2.6451]	kg	25	0.9828		Tlaxcala	PF	Díaz et al. 2007
CC [WI]	Tree	*Pinus pseudostrobus*	[3553.1]*[DBH^2.2245]	kg	20	0.8730		Estado de México	PF	Palma 2011
CC [WI]	Tree	*Psidium guajava*	[1.0096]*[DBH^1.2235]	kg	18	0.8700		Aguascalientes	CF	Meraz et al. 2013
CC [WI]	Tree	*Quercus laurina*	[0.0196]*[DBH^2.7353]	kg	14	0.9617		Estado de México	OF	Tomas 2013
CC [WI]	Tree	*Quercus rugosa*	[0.0192]*[DBH^2.7569]	kg	12	0.9790		Estado de México	OF	Tomas 2013

AGB above-ground biomass, *BGB* below-ground biomass, *B* branches, *CC* carbon content, CF cultivated forest, *DS* deserts shrubland, *ETF* evergreen tropical forest, *FF* fir forest, *F* foliage, *LB* leaves + branches, *M* mangrove, *MS* mezquite shrubland, *OF* oak forest, *OPF* oak-pine forest, *PF* pine forest, *POF* pine-oak forest, *R* roots, *SETF* semi-evergreen tropical forest, *S* stem, *SR* support roots, *TT* Tamaulipan thornscrubland, *TDF* tropical deciduous forest, *TMCF* tropical montane cloud forest, *WI* whole individual, *XS* xerophytic shrubland, *BA* basal area, *TH* total height, *D0.30* diameter of the stem at 30 cm, *DBH* diameter at breast height (1.30 m), *WD* wood density, *D0.10* diameter of the stem at 10 cm, *D0.0* basal diameter of the stem, *BP* basal perimeter of the stem, *RC1, RC2* radii of two orthogonal diameters of the crown, *Vol* volume of the trunk with bark, *DC* average diameter of the tree canopy, *HC* height of the tree canopy

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