Regional Yield and Carbon Tables of Betula alnoides, Duabanga grandiflora, Magnolia champaca and Toona ciliata in Meghalaya

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Rain Forest Research Institute, Jorhat
(Indian Council of Forestry Research & Education)
and
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Table 1: Volume table for *Betula alnoides* (10-30 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)														
	11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
10	0.040	0.044	0.047	0.051	0.055	0.058	0.062	0.066	0.069	0.073	0.077	0.080	0.084	0.088	0.091
11	0.049	0.053	0.057	0.062	0.066	0.071	0.075	0.079	0.084	0.088	0.093	0.097	0.102	0.106	0.110
12	0.058	0.063	0.068	0.074	0.079	0.084	0.089	0.095	0.100	0.105	0.110	0.116	0.121	0.126	0.131
13	0.068	0.074	0.080	0.086	0.093	0.099	0.105	0.111	0.117	0.123	0.130	0.136	0.142	0.148	0.154
14	0.079	0.086	0.093	0.100	0.107	0.114	0.122	0.129	0.136	0.143	0.150	0.157	0.165	0.172	0.179
15	0.090	0.099	0.107	0.115	0.123	0.131	0.140	0.148	0.156	0.164	0.172	0.181	0.189	0.197	0.205
16	0.103	0.112	0.121	0.131	0.140	0.150	0.159	0.168	0.178	0.187	0.196	0.206	0.215	0.224	0.234
17	**0.116**	**0.127**	**0.137**	**0.148**	**0.158**	**0.169**	**0.179**	**0.190**	**0.200**	**0.211**	**0.222**	0.232	0.243	0.253	0.264
18	0.130	0.142	**0.154**	**0.166**	**0.177**	**0.189**	**0.201**	**0.213**	**0.225**	**0.237**	**0.248**	0.260	0.272	0.284	0.296
19	0.145	0.158	0.171	**0.184**	**0.198**	**0.211**	**0.224**	**0.237**	**0.250**	**0.264**	**0.277**	0.290	0.303	0.316	0.329
20	0.161	0.175	0.190	0.204	**0.219**	**0.234**	**0.248**	**0.263**	**0.277**	**0.292**	**0.307**	0.321	0.336	0.350	0.365
21	0.177	0.193	0.209	0.225	0.241	**0.258**	**0.274**	**0.290**	**0.306**	**0.322**	**0.338**	**0.354**	0.370	0.386	0.402
22	0.194	0.212	0.230	0.247	0.265	**0.283**	**0.300**	**0.318**	**0.336**	**0.353**	**0.371**	**0.389**	**0.406**	**0.424**	0.442
23	0.212	0.232	0.251	0.270	0.290	**0.309**	**0.328**	**0.348**	**0.367**	**0.386**	**0.405**	**0.425**	**0.444**	**0.463**	0.483
24	0.231	0.252	0.273	0.294	0.315	**0.336**	**0.357**	**0.378**	**0.399**	**0.420**	**0.442**	**0.463**	**0.484**	**0.505**	0.526
25	0.251	0.274	0.297	0.319	0.342	**0.365**	**0.388**	**0.411**	**0.433**	**0.456**	**0.479**	**0.502**	**0.525**	**0.548**	0.570
26	0.271	0.296	0.321	0.345	0.370	**0.395**	**0.419**	**0.444**	**0.469**	**0.493**	**0.518**	**0.543**	**0.568**	**0.592**	0.617
27	0.293	0.319	0.346	0.373	0.399	0.426	0.452	0.479	**0.506**	**0.532**	**0.559**	**0.585**	**0.612**	**0.639**	0.665
28	0.315	0.343	0.372	0.401	0.429	0.458	0.486	0.515	**0.544**	**0.572**	**0.601**	**0.630**	**0.658**	**0.687**	0.715
29	0.338	0.368	0.399	0.430	0.460	0.491	0.522	0.553	0.583	0.614	**0.645**	**0.675**	**0.706**	**0.737**	0.767
30	0.361	0.394	0.427	0.460	0.493	0.526	0.558	0.591	0.624	0.657	0.690	0.723	0.756	0.788	0.821

(The values which are bold are within the range of observed data)

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Table 2: Volume table for *Betula alnoides* (31-50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)															
	15	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
31	0.417	0.444	**0.472**	**0.500**	**0.528**	**0.555**	**0.583**	0.611	0.639	0.667	0.694	0.722	0.750	0.778	0.805	0.833
32	0.444	0.473	**0.503**	**0.533**	**0.562**	**0.592**	**0.621**	0.651	0.681	0.710	0.740	0.769	0.799	0.829	0.858	0.888
33	0.472	0.504	**0.535**	**0.566**	**0.598**	**0.629**	**0.661**	**0.692**	**0.724**	0.755	0.787	0.818	0.850	0.881	0.913	0.944
34	0.501	0.535	**0.568**	**0.601**	**0.635**	**0.668**	**0.702**	**0.735**	**0.768**	0.802	0.835	0.869	0.902	0.935	0.969	1.002
35	0.531	**0.566**	**0.602**	**0.637**	**0.673**	**0.708**	**0.743**	**0.779**	**0.814**	**0.850**	**0.885**	0.920	0.956	0.991	1.027	1.062
36	0.562	**0.599**	**0.637**	**0.674**	**0.712**	**0.749**	**0.787**	**0.824**	**0.861**	**0.899**	**0.936**	0.974	1.011	1.049	1.086	1.124
37	0.593	**0.633**	**0.673**	**0.712**	**0.752**	**0.791**	**0.831**	**0.870**	**0.910**	**0.950**	**0.989**	1.029	1.068	1.108	1.147	1.187
38	0.626	**0.668**	**0.709**	**0.751**	**0.793**	**0.835**	**0.876**	**0.918**	**0.960**	**1.002**	**1.043**	1.085	1.127	1.168	1.210	1.252
39	0.659	**0.703**	**0.747**	**0.791**	**0.835**	**0.879**	**0.923**	**0.967**	**1.011**	**1.055**	**1.099**	1.143	1.187	1.231	1.275	1.319
40	0.694	**0.740**	**0.786**	**0.832**	**0.879**	**0.925**	**0.971**	**1.017**	**1.064**	**1.110**	**1.156**	1.202	1.248	1.295	1.341	1.387
41	0.729	**0.777**	**0.826**	**0.874**	**0.923**	**0.972**	**1.020**	**1.069**	**1.117**	**1.166**	**1.215**	1.263	1.312	1.360	1.409	1.457
42	0.765	**0.816**	**0.867**	**0.918**	**0.969**	**1.020**	**1.071**	**1.122**	**1.173**	**1.224**	**1.274**	1.325	1.376	1.427	1.478	1.529
43	0.802	0.855	0.908	0.962	1.015	**1.069**	**1.122**	**1.176**	**1.229**	**1.282**	**1.336**	1.389	1.443	1.496	1.550	1.603
44	0.839	0.895	0.951	1.007	1.063	**1.119**	**1.175**	**1.231**	**1.287**	**1.343**	**1.399**	**1.455**	**1.511**	1.567	1.623	1.679
45	0.878	0.936	0.995	1.053	1.112	**1.170**	**1.229**	**1.287**	**1.346**	**1.405**	**1.463**	**1.522**	**1.580**	1.639	1.697	1.756
46	0.917	0.978	1.040	1.101	1.162	**1.223**	**1.284**	**1.345**	1.407	1.468	1.529	1.590	1.651	1.712	1.773	1.835
47	0.958	1.021	1.085	1.149	1.213	**1.277**	**1.341**	**1.404**	1.468	1.532	1.596	1.660	1.724	1.788	1.851	1.915
48	0.999	1.065	1.132	1.199	1.265	**1.332**	**1.398**	**1.465**	1.531	1.598	1.665	1.731	1.798	1.864	1.931	1.998
49	1.041	1.110	1.180	1.249	1.318	1.388	1.457	1.527	1.596	1.665	1.735	1.804	1.874	1.943	2.012	2.082
50	1.084	1.156	1.228	1.301	1.373	1.445	1.517	1.590	1.662	1.734	1.806	1.879	1.951	2.023	2.095	2.168

(The values which are bold are within the range of observed data)

Table 3: Volume table for *Betula alnoides* (>50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)																				
	15	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**
51	0.995	1.061	1.128	1.194	**1.260**	**1.327**	**1.393**	**1.459**	1.525	1.592	1.658	1.724	1.791	1.857	1.923	1.990	2.056	2.122	2.189	2.255	2.321
52	1.034	1.103	1.172	1.241	**1.310**	**1.379**	**1.448**	**1.517**	**1.586**	1.655	1.724	1.793	1.862	1.931	2.000	2.069	2.138	2.206	2.275	2.344	2.413
53	1.074	1.146	1.218	**1.289**	**1.361**	**1.433**	**1.504**	**1.576**	**1.647**	1.719	1.791	1.862	1.934	2.006	2.077	2.149	2.221	2.292	2.364	2.435	2.507
54	1.115	1.190	1.264	**1.338**	**1.413**	**1.487**	**1.562**	**1.636**	**1.710**	**1.785**	**1.859**	**1.933**	**2.008**	**2.082**	**2.156**	**2.231**	2.305	2.379	2.454	2.528	2.603
55	1.157	1.234	1.311	**1.388**	**1.466**	**1.543**	**1.620**	**1.697**	**1.774**	**1.851**	**1.928**	**2.006**	**2.083**	**2.160**	**2.237**	**2.314**	2.391	2.468	2.546	2.623	2.700
56	1.200	1.279	1.359	**1.439**	**1.519**	**1.599**	**1.679**	**1.759**	**1.839**	**1.919**	**1.999**	**2.079**	**2.159**	2.239	**2.319**	2.399	2.479	2.559	2.639	2.719	2.799
57	1.243	1.326	1.408	**1.491**	**1.574**	**1.657**	**1.740**	**1.823**	**1.906**	**1.988**	**2.071**	**2.154**	**2.237**	2.320	**2.403**	2.485	2.568	2.651	2.734	2.817	2.900
58	1.287	1.373	**1.458**	**1.544**	**1.630**	**1.716**	**1.801**	**1.887**	**1.973**	**2.059**	**2.145**	**2.230**	**2.316**	**2.402**	**2.488**	2.573	2.659	2.745	2.831	2.917	3.002
59	1.331	1.420	1.509	1.598	**1.687**	**1.775**	**1.864**	**1.953**	**2.042**	**2.130**	**2.219**	**2.308**	**2.397**	**2.485**	**2.574**	2.663	2.752	2.840	2.929	3.018	3.107
60	1.377	1.469	1.561	1.652	**1.744**	**1.836**	**1.928**	**2.020**	**2.111**	**2.203**	**2.295**	**2.387**	**2.479**	**2.570**	**2.662**	2.754	2.846	2.938	3.029	3.121	3.213
61	1.423	1.518	1.613	1.708	**1.803**	**1.898**	**1.993**	**2.087**	**2.182**	**2.277**	**2.372**	**2.467**	**2.562**	**2.657**	**2.752**	2.847	2.941	3.036	3.131	3.226	3.321
62	1.470	1.568	1.666	1.764	**1.862**	**1.960**	**2.058**	**2.156**	**2.255**	**2.353**	**2.451**	**2.549**	**2.647**	**2.745**	**2.843**	2.941	3.039	3.137	3.235	3.333	3.431
63	1.518	1.619	1.721	1.822	**1.923**	**2.024**	**2.125**	**2.227**	**2.328**	**2.429**	**2.530**	**2.631**	**2.733**	**2.834**	**2.935**	3.036	3.137	3.239	3.340	3.441	3.542
64	1.567	1.671	1.776	1.880	1.985	2.089	2.193	2.298	2.402	2.507	**2.611**	**2.716**	**2.820**	**2.925**	**3.029**	3.133	3.238	3.342	3.447	3.551	3.656
65	1.616	1.724	1.832	1.939	2.047	2.155	2.262	2.370	2.478	2.586	**2.693**	**2.801**	**2.909**	**3.017**	**3.124**	3.232	3.340	3.448	3.555	3.663	3.771
66	1.666	1.777	1.888	1.999	2.110	2.222	2.333	2.444	2.555	2.666	**2.777**	**2.888**	**2.999**	**3.110**	**3.221**	3.332	3.443	3.554	3.666	3.777	3.888
67	1.717	1.832	1.946	2.060	2.175	2.289	2.404	2.518	2.633	2.747	**2.862**	**2.976**	**3.091**	**3.205**	**3.320**	3.434	3.549	3.663	3.777	3.892	4.006
68	1.769	1.887	2.005	2.122	2.240	2.358	2.476	2.594	2.712	2.830	**2.948**	**3.066**	**3.184**	**3.302**	**3.419**	3.537	3.655	3.773	3.891	4.009	4.127
69	1.821	1.942	2.064	2.185	2.307	2.428	2.550	2.671	2.792	2.914	**3.035**	**3.157**	3.278	3.399	3.521	3.642	3.764	3.885	4.006	4.128	4.249
70	1.874	1.999	2.124	2.249	2.374	2.499	2.624	2.749	2.874	2.999	**3.124**	**3.249**	3.374	3.499	3.624	3.749	3.873	3.998	4.123	4.248	4.373

(The values which are bold are within the range of observed data)

Table 4 Biomass table for *Betula alnoides* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
10	23.01	25.10	27.19	29.28	31.37	33.46	35.55	37.65	39.74	41.83	43.92	46.01	48.10	50.19	52.29
11	27.84	30.37	32.90	35.43	37.96	40.49	43.02	45.55	48.08	50.61	53.14	55.67	58.21	60.74	63.27
12	33.13	36.14	39.15	42.16	45.18	48.19	51.20	54.21	57.22	60.23	63.25	66.26	69.27	72.28	75.29
13	38.88	42.41	45.95	49.48	53.02	56.55	60.09	63.62	67.16	70.69	74.23	77.76	81.29	84.83	88.36
14	45.09	49.19	53.29	57.39	61.49	65.59	69.69	73.79	77.89	81.98	86.08	90.18	94.28	98.38	102.48
15	51.76	56.47	61.17	65.88	70.59	75.29	80.00	84.70	89.41	94.12	98.82	103.53	108.23	112.94	117.64
16	58.90	64.25	69.60	74.96	80.31	85.67	91.02	96.37	101.73	107.08	112.44	117.79	123.14	128.50	133.85
17	66.49	72.53	78.58	84.62	90.66	96.71	102.75	108.80	114.84	120.89	126.93	132.97	139.02	145.06	151.11
18	74.54	81.32	88.09	94.87	101.64	108.42	115.20	121.97	128.75	135.53	142.30	149.08	155.85	162.63	169.41
19	83.05	90.60	98.15	105.70	113.25	120.80	128.35	135.90	143.45	151.00	158.55	166.10	173.65	181.20	188.75
20	92.02	100.39	108.76	117.12	125.49	133.85	142.22	150.58	158.95	167.32	175.68	184.05	192.41	200.78	209.15
21	101.46	110.68	119.90	129.13	138.35	147.57	156.80	166.02	175.24	184.47	193.69	202.91	212.14	221.36	230.58
22	111.35	121.47	131.59	141.72	151.84	161.96	172.08	182.21	192.33	202.45	212.57	222.70	232.82	242.94	253.07
23	121.70	132.77	143.83	154.89	165.96	177.02	188.08	199.15	210.21	221.28	232.34	243.40	254.47	265.53	276.59
24	132.51	144.56	156.61	168.65	180.70	192.75	204.79	216.84	228.89	240.94	252.98	265.03	277.08	289.12	301.17
25	143.79	156.86	169.93	183.00	196.07	209.15	222.22	235.29	248.36	261.43	274.50	287.57	300.65	313.72	326.79
26	155.52	169.66	183.80	197.93	212.07	226.21	240.35	254.49	268.63	282.76	296.90	311.04	325.18	339.32	353.46
27	167.71	182.96	198.21	213.45	228.70	243.95	259.19	274.44	289.69	304.93	320.18	335.43	350.67	365.92	381.17
28	180.37	196.76	213.16	229.56	245.95	262.35	278.75	295.15	311.54	327.94	344.34	360.73	377.13	393.53	409.92
29	193.48	211.07	228.66	246.25	263.84	281.43	299.01	316.60	334.19	351.78	369.37	386.96	404.55	422.14	439.73
30	207.05	225.88	244.70	263.52	282.35	301.17	319.99	338.81	357.64	376.46	395.28	414.11	432.93	451.75	470.58

Table 5 Biomass table for *Betula alnoides* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	238.71	254.62	270.54	286.45	318.28	318.28	334.19	350.11	366.02	381.93	397.85	413.76	429.67	445.59	461.50	477.42
32	254.36	271.31	288.27	305.23	339.14	339.14	356.10	373.06	390.01	406.97	423.93	440.89	457.84	474.80	491.76	508.71
33	270.50	288.54	306.57	324.60	360.67	360.67	378.70	396.74	414.77	432.80	450.84	468.87	486.90	504.94	522.97	541.01
34	287.15	306.29	325.43	344.57	382.86	382.86	402.00	421.15	440.29	459.43	478.58	497.72	516.86	536.00	555.15	574.29
35	304.28	324.57	344.86	365.14	405.71	405.71	426.00	446.28	466.57	486.86	507.14	527.43	547.71	568.00	588.28	608.57
36	321.92	343.38	364.84	386.30	429.23	429.23	450.69	472.15	493.61	515.07	536.53	558.00	579.46	600.92	622.38	643.84
37	340.05	362.72	385.39	408.06	453.40	453.40	476.07	498.75	521.42	544.09	566.76	589.43	612.10	634.77	657.44	680.11
38	358.68	382.60	406.51	430.42	478.24	478.24	502.16	526.07	549.98	573.89	597.81	621.72	645.63	669.54	693.45	717.37
39	377.81	403.00	428.18	453.37	503.75	503.75	528.93	554.12	579.31	604.50	629.68	654.87	680.06	705.24	730.43	755.62
40	397.43	423.93	450.42	476.92	529.91	529.91	556.41	582.90	609.40	635.89	662.39	688.88	715.38	741.87	768.37	794.87
41	417.55	445.39	473.23	501.06	556.74	556.74	584.57	612.41	640.25	668.08	695.92	723.76	751.60	779.43	807.27	835.11
42	438.17	467.38	496.59	525.80	584.23	584.23	613.44	642.65	671.86	701.07	730.28	759.49	788.71	817.92	847.13	876.34
43	459.28	489.90	520.52	551.14	612.38	612.38	643.00	673.62	704.23	734.85	765.47	796.09	826.71	857.33	887.95	918.57
44	480.89	512.95	545.01	577.07	641.19	641.19	673.25	705.31	737.37	769.43	801.49	833.55	865.61	897.67	929.73	961.79
45	503.00	536.53	570.07	603.60	670.67	670.67	704.20	737.73	771.27	804.80	838.33	871.87	905.40	938.93	972.47	1006.00
46	525.60	560.65	595.69	630.73	700.81	700.81	735.85	770.89	805.93	840.97	876.01	911.05	946.09	981.13	1016.17	1051.21
47	548.71	585.29	621.87	658.45	731.61	731.61	768.19	804.77	841.35	877.93	914.51	951.09	987.67	1024.25	1060.83	1097.41
48	572.30	610.46	648.61	686.76	763.07	763.07	801.22	839.38	877.53	915.69	953.84	991.99	1030.15	1068.30	1106.45	1144.61
49	596.40	636.16	675.92	715.68	795.20	795.20	834.96	874.72	914.48	954.24	994.00	1033.76	1073.52	1113.28	1153.04	1192.80
50	620.99	662.39	703.79	745.19	827.99	827.99	869.38	910.78	952.18	993.58	1034.98	1076.38	1117.78	1159.18	1200.58	1241.98

Table 6 Biomass table for *Betula alnoides* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	570.07	608.07	646.08	684.08	722.09	760.09	798.09	836.10	874.10	912.11	950.11	988.12	1026.12	1064.13	1102.13	1140.14	1178.14	1216.14	1254.15	1292.15	1330.16
52	592.64	632.15	671.66	711.17	750.68	790.19	829.70	869.21	908.72	948.23	987.74	1027.25	1066.76	1106.27	1145.78	1185.28	1224.79	1264.30	1303.81	1343.32	1382.83
53	615.66	656.70	697.74	738.79	779.83	820.87	861.92	902.96	944.01	985.05	1026.09	1067.14	1108.18	1149.22	1190.27	1231.31	1272.35	1313.40	1354.44	1395.49	1436.53
54	639.11	681.71	724.32	766.93	809.54	852.14	894.75	937.36	979.96	1022.57	1065.18	1107.79	1150.39	1193.00	1235.61	1278.21	1320.82	1363.43	1406.04	1448.64	1491.25
55	663.00	707.20	751.40	795.60	839.80	884.00	928.20	972.40	1016.60	1060.79	1104.99	1149.19	1193.39	1237.59	1281.79	1325.99	1370.19	1414.39	1458.59	1502.79	1546.99
56	687.32	733.15	778.97	824.79	870.61	916.43	962.25	1008.08	1053.90	1099.72	1145.54	1191.36	1237.18	1283.01	1328.83	1374.65	1420.47	1466.29	1512.11	1557.94	1603.76
57	712.09	759.56	807.04	854.51	901.98	949.46	996.93	1044.40	1091.87	1139.35	1186.82	1234.29	1281.76	1329.24	1376.71	1424.18	1471.66	1519.13	1566.60	1614.07	1661.55
58	737.30	786.45	835.60	884.76	933.91	983.06	1032.21	1081.37	1130.52	1179.67	1228.83	1277.98	1327.13	1376.29	1425.44	1474.59	1523.75	1572.90	1622.05	1671.20	1720.36
59	762.94	813.80	864.66	915.53	966.39	1017.25	1068.12	1118.98	1169.84	1220.70	1271.57	1322.43	1373.29	1424.15	1475.02	1525.88	1576.74	1627.60	1678.47	1729.33	1780.19
60	789.02	841.62	894.22	946.83	999.43	1052.03	1104.63	1157.23	1209.83	1262.43	1315.04	1367.64	1420.24	1472.84	1525.44	1578.04	1630.64	1683.24	1735.85	1788.45	1841.05
61	815.54	869.91	924.28	978.65	1033.02	1087.39	1141.76	1196.13	1250.50	1304.87	1359.23	1413.60	1467.97	1522.34	1576.71	1631.08	1685.45	1739.82	1794.19	1848.56	1902.93
62	842.50	898.67	954.83	1011.00	1067.17	1123.33	1179.50	1235.67	1291.83	1348.00	1404.17	1460.33	1516.50	1572.66	1628.83	1685.00	1741.16	1797.33	1853.50	1909.66	1965.83
63	869.90	927.89	985.88	1043.87	1101.87	1159.86	1217.85	1275.85	1333.84	1391.83	1449.83	1507.82	1565.81	1623.81	1681.80	1739.79	1797.78	1855.78	1913.77	1971.76	2029.76
64	897.73	957.58	1017.43	1077.28	1137.13	1196.97	1256.82	1316.67	1376.52	1436.37	1496.22	1556.07	1615.92	1675.76	1735.61	1795.46	1855.31	1915.16	1975.01	2034.86	2094.70
65	926.00	987.74	1049.47	1111.20	1172.94	1234.67	1296.41	1358.14	1419.87	1481.61	1543.34	1605.07	1666.81	1728.54	1790.27	1852.01	1913.74	1975.47	2037.21	2098.94	2160.68
66	954.72	1018.36	1082.01	1145.66	1209.31	1272.95	1336.60	1400.25	1463.90	1527.54	1591.19	1654.84	1718.49	1782.14	1845.78	1909.43	1973.08	2036.73	2100.37	2164.02	2227.67
67	983.87	1049.46	1115.05	1180.64	1246.23	1311.82	1377.41	1443.00	1508.59	1574.18	1639.78	1705.37	1770.96	1836.55	1902.14	1967.73	2033.32	2098.91	2164.50	2230.09	2295.69
68	1013.45	1081.02	1148.58	1216.14	1283.71	1351.27	1418.84	1486.40	1553.96	1621.53	1689.09	1756.65	1824.22	1891.78	1959.34	2026.91	2094.47	2162.03	2229.60	2297.16	2364.73
69	1043.48	1113.05	1182.61	1252.18	1321.74	1391.31	1460.87	1530.44	1600.00	1669.57	1739.13	1808.70	1878.26	1947.83	2017.40	2086.96	2156.53	2226.09	2295.66	2365.22	2434.79
70	1073.95	1145.54	1217.14	1288.73	1360.33	1431.93	1503.52	1575.12	1646.72	1718.31	1789.91	1861.51	1933.10	2004.70	2076.29	2147.89	2219.49	2291.08	2362.68	2434.28	2505.87

Table 7 Carbon table for *Betula alnoides* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	11.50	12.55	13.59	14.64	15.69	16.73	17.78	18.82	19.87	20.91	21.96	23.01	24.05	25.10	26.14
11	13.92	15.18	16.45	17.71	18.98	20.25	21.51	22.78	24.04	25.31	26.57	27.84	29.10	30.37	31.63
12	16.56	18.07	19.58	21.08	22.59	24.09	25.60	27.11	28.61	30.12	31.62	33.13	34.63	36.14	37.65
13	19.44	21.21	22.97	24.74	26.51	28.28	30.04	31.81	33.58	35.35	37.11	38.88	40.65	42.41	44.18
14	22.55	24.60	26.65	28.69	30.74	32.79	34.84	36.89	38.94	40.99	43.04	45.09	47.14	49.19	51.24
15	25.88	28.23	30.59	32.94	35.29	37.65	40.00	42.35	44.70	47.06	49.41	51.76	54.12	56.47	58.82
16	29.45	32.12	34.80	37.48	40.16	42.83	45.51	48.19	50.86	53.54	56.22	58.90	61.57	64.25	66.93
17	33.24	36.27	39.29	42.31	45.33	48.35	51.38	54.40	57.42	60.44	63.47	66.49	69.51	72.53	75.55
18	37.27	40.66	44.05	47.43	50.82	54.21	57.60	60.99	64.37	67.76	71.15	74.54	77.93	81.32	84.70
19	41.53	45.30	49.08	52.85	56.63	60.40	64.18	67.95	71.73	75.50	79.28	83.05	86.83	90.60	94.38
20	46.01	50.19	54.38	58.56	62.74	66.93	71.11	75.29	79.48	83.66	87.84	92.02	96.21	100.39	104.57
21	50.73	55.34	59.95	64.56	69.17	73.79	78.40	83.01	87.62	92.23	96.84	101.46	106.07	110.68	115.29
22	55.67	60.74	65.80	70.86	75.92	80.98	86.04	91.10	96.16	101.23	106.29	111.35	116.41	121.47	126.53
23	60.85	66.38	71.91	77.45	82.98	88.51	94.04	99.57	105.11	110.64	116.17	121.70	127.23	132.77	138.30
24	66.26	72.28	78.30	84.33	90.35	96.37	102.40	108.42	114.44	120.47	126.49	132.51	138.54	144.56	150.58
25	71.89	78.43	84.97	91.50	98.04	104.57	111.11	117.64	124.18	130.72	137.25	143.79	150.32	156.86	163.39
26	77.76	84.83	91.90	98.97	106.04	113.11	120.17	127.24	134.31	141.38	148.45	155.52	162.59	169.66	176.73
27	83.86	91.48	99.10	106.73	114.35	121.97	129.60	137.22	144.84	152.47	160.09	167.71	175.34	182.96	190.58
28	90.18	98.38	106.58	114.78	122.98	131.18	139.37	147.57	155.77	163.97	172.17	180.37	188.57	196.76	204.96
29	96.74	105.53	114.33	123.12	131.92	140.71	149.51	158.30	167.10	175.89	184.69	193.48	202.27	211.07	219.86
30	103.53	112.94	122.35	131.76	141.17	150.58	160.00	169.41	178.82	188.23	197.64	207.05	216.47	225.88	235.29

Table 8 Carbon table for *Betula alnoides* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	119.35	127.31	135.27	143.22	151.18	159.14	167.10	175.05	183.01	190.97	198.92	206.88	214.84	222.79	230.75	238.71
32	127.18	135.66	144.14	152.61	161.09	169.57	178.05	186.53	195.01	203.49	211.96	220.44	228.92	237.40	245.88	254.36
33	135.25	144.27	153.28	162.30	171.32	180.34	189.35	198.37	207.39	216.40	225.42	234.44	243.45	252.47	261.49	270.50
34	143.57	153.14	162.72	172.29	181.86	191.43	201.00	210.57	220.14	229.72	239.29	248.86	258.43	268.00	277.57	287.15
35	152.14	162.29	172.43	182.57	192.71	202.86	213.00	223.14	233.28	243.43	253.57	263.71	273.86	284.00	294.14	304.28
36	160.96	171.69	182.42	193.15	203.88	214.61	225.34	236.08	246.81	257.54	268.27	279.00	289.73	300.46	311.19	321.92
37	170.03	181.36	192.70	204.03	215.37	226.70	238.04	249.37	260.71	272.04	283.38	294.71	306.05	317.38	328.72	340.05
38	179.34	191.30	203.25	215.21	227.17	239.12	251.08	263.03	274.99	286.95	298.90	310.86	322.81	334.77	346.73	358.68
39	188.90	201.50	214.09	226.69	239.28	251.87	264.47	277.06	289.65	302.25	314.84	327.43	340.03	352.62	365.22	377.81
40	198.72	211.96	225.21	238.46	251.71	264.96	278.20	291.45	304.70	317.95	331.19	344.44	357.69	370.94	384.19	397.43
41	208.78	222.69	236.61	250.53	264.45	278.37	292.29	306.21	320.12	334.04	347.96	361.88	375.80	389.72	403.63	417.55
42	219.08	233.69	248.30	262.90	277.51	292.11	306.72	321.32	335.93	350.54	365.14	379.75	394.35	408.96	423.56	438.17
43	229.64	244.95	260.26	275.57	290.88	306.19	321.50	336.81	352.12	367.43	382.74	398.05	413.35	428.66	443.97	459.28
44	240.45	256.48	272.51	288.54	304.57	320.60	336.63	352.66	368.69	384.71	400.74	416.77	432.80	448.83	464.86	480.89
45	251.50	268.27	285.03	301.80	318.57	335.33	352.10	368.87	385.63	402.40	419.17	435.93	452.70	469.47	486.23	503.00
46	262.80	280.32	297.84	315.36	332.88	350.40	367.92	385.44	402.96	420.48	438.00	455.52	473.04	490.56	508.08	525.60
47	274.35	292.64	310.93	329.22	347.51	365.80	384.09	402.38	420.67	438.96	457.25	475.54	493.84	512.13	530.42	548.71
48	286.15	305.23	324.31	343.38	362.46	381.54	400.61	419.69	438.77	457.84	476.92	496.00	515.07	534.15	553.23	572.30
49	298.20	318.08	337.96	357.84	377.72	397.60	417.48	437.36	457.24	477.12	497.00	516.88	536.76	556.64	576.52	596.40
50	310.49	331.19	351.89	372.59	393.29	413.99	434.69	455.39	476.09	496.79	517.49	538.19	558.89	579.59	600.29	620.99

Table 9 Carbon table for *Betula alnoides* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	285.03	304.04	323.04	342.04	361.04	380.05	399.05	418.05	437.05	456.05	475.06	494.06	513.06	532.06	551.07	570.07	589.07	608.07	627.07	646.08	665.08
52	296.32	316.08	335.83	355.59	375.34	395.09	414.85	434.60	454.36	474.11	493.87	513.62	533.38	553.13	572.89	592.64	612.40	632.15	651.91	671.66	691.42
53	307.83	328.35	348.87	369.39	389.92	410.44	430.96	451.48	472.00	492.52	513.05	533.57	554.09	574.61	595.13	615.66	636.18	656.70	677.22	697.74	718.26
54	319.55	340.86	362.16	383.46	404.77	426.07	447.37	468.68	489.98	511.29	532.59	553.89	575.20	596.50	617.80	639.11	660.41	681.71	703.02	724.32	745.62
55	331.50	353.60	375.70	397.80	419.90	442.00	464.10	486.20	508.30	530.40	552.50	574.60	596.70	618.80	640.90	663.00	685.10	707.20	729.30	751.40	773.50
56	343.66	366.57	389.48	412.39	435.31	458.22	481.13	504.04	526.95	549.86	572.77	595.68	618.59	641.50	664.41	687.32	710.24	733.15	756.06	778.97	801.88
57	356.05	379.78	403.52	427.25	450.99	474.73	498.46	522.20	545.94	569.67	593.41	617.15	640.88	664.62	688.36	712.09	735.83	759.56	783.30	807.04	830.77
58	368.65	393.22	417.80	442.38	466.95	491.53	516.11	540.68	565.26	589.84	614.41	638.99	663.57	688.14	712.72	737.30	761.87	786.45	811.03	835.60	860.18
59	381.47	406.90	432.33	457.76	483.19	508.63	534.06	559.49	584.92	610.35	635.78	661.21	686.65	712.08	737.51	762.94	788.37	813.80	839.23	864.66	890.10
60	394.51	420.81	447.11	473.41	499.71	526.01	552.31	578.62	604.92	631.22	657.52	683.82	710.12	736.42	762.72	789.02	815.32	841.62	867.92	894.22	920.52
61	407.77	434.96	462.14	489.32	516.51	543.69	570.88	598.06	625.25	652.43	679.62	706.80	733.99	761.17	788.36	815.54	842.73	869.91	897.09	924.28	951.46
62	421.25	449.33	477.42	505.50	533.58	561.67	589.75	617.83	645.92	674.00	702.08	730.17	758.25	786.33	814.42	842.50	870.58	898.67	926.75	954.83	982.92
63	434.95	463.94	492.94	521.94	550.93	579.93	608.93	637.92	666.92	695.92	724.91	753.91	782.91	811.90	840.90	869.90	898.89	927.89	956.89	985.88	1014.88
64	448.87	478.79	508.71	538.64	568.56	598.49	628.41	658.34	688.26	718.18	748.11	778.03	807.96	837.88	867.81	897.73	927.65	957.58	987.50	1017.43	1047.35
65	463.00	493.87	524.74	555.60	586.47	617.34	648.20	679.07	709.94	740.80	771.67	802.54	833.40	864.27	895.14	926.00	956.87	987.74	1018.60	1049.47	1080.34
66	477.36	509.18	541.01	572.83	604.65	636.48	668.30	700.12	731.95	763.77	795.60	827.42	859.24	891.07	922.89	954.72	986.54	1018.36	1050.19	1082.01	1113.83
67	491.93	524.73	557.52	590.32	623.11	655.91	688.71	721.50	754.30	787.09	819.89	852.68	885.48	918.27	951.07	983.87	1016.66	1049.46	1082.25	1115.05	1147.84
68	506.73	540.51	574.29	608.07	641.85	675.64	709.42	743.20	776.98	810.76	844.54	878.33	912.11	945.89	979.67	1013.45	1047.24	1081.02	1114.80	1148.58	1182.36
69	521.74	556.52	591.31	626.09	660.87	695.65	730.44	765.22	800.00	834.78	869.57	904.35	939.13	973.91	1008.70	1043.48	1078.26	1113.05	1147.83	1182.61	1217.39
70	536.97	572.77	608.57	644.37	680.17	715.96	751.76	787.56	823.36	859.16	894.95	930.75	966.55	1002.35	1038.15	1073.95	1109.74	1145.54	1181.34	1217.14	1252.94

Table 10 Volume, biomass and carbon table for *Betula alnoides* (DBH 10 -50 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
10	0.068	39.04	19.52	**31**	0.603	345.37	172.68
11	0.082	47.24	23.62	**32**	0.642	368.01	184.01
12	0.098	56.22	28.11	**33**	0.683	391.37	195.69
13	0.115	65.98	32.99	**34**	0.725	415.45	207.72
14	0.134	76.53	38.26	**35**	0.768	440.25	220.12
15	0.153	87.85	43.92	**36**	0.813	465.76	232.88
16	0.174	99.95	49.98	**37**	0.859	492.00	246.00
17	0.197	112.84	56.42	**38**	0.906	518.95	259.48
18	0.221	126.50	63.25	**39**	0.954	546.63	273.31
19	0.246	140.95	70.47	**40**	1.004	575.02	287.51
20	0.273	156.18	78.09	**41**	1.054	604.13	302.06
21	0.300	172.19	86.09	**42**	1.106	633.96	316.98
22	0.330	188.97	94.49	**43**	1.160	664.50	332.25
23	0.360	206.54	103.27	**44**	1.214	695.77	347.89
24	0.392	224.89	112.45	**45**	1.270	727.76	363.88
25	0.426	244.03	122.01	**46**	1.327	760.46	380.23
26	0.461	263.94	131.97	**47**	1.385	793.88	396.94
27	0.497	284.63	142.32	**48**	1.445	828.02	414.01
28	0.534	306.11	153.05	**49**	1.506	862.88	431.44
29	0.573	328.36	164.18	**50**	1.568	898.46	449.23
30	0.613	351.40	175.70				

Table 11 Volume, biomass and carbon table for *Betula alnoides* (DBH 51-100 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
51	1.583	907.04	453.52	**76**	3.515	2014.25	1007.13
52	1.646	942.96	471.48	**77**	3.608	2067.61	1033.80
53	1.710	979.58	489.79	**78**	3.703	2121.66	1060.83
54	1.775	1016.89	508.45	**79**	3.798	2176.41	1088.21
55	1.841	1054.90	527.45	**80**	3.895	2231.86	1115.93
56	1.909	1093.61	546.81	**81**	3.993	2288.00	1144.00
57	1.977	1133.02	566.51	**82**	4.092	2344.85	1172.42
58	2.047	1173.12	586.56	**83**	4.193	2402.39	1201.19
69	2.119	1213.92	606.96	**84**	4.294	2460.62	1230.31
60	2.191	1255.42	627.71	**85**	4.397	2519.56	1259.78
61	2.265	1297.62	648.81	**86**	4.501	2579.19	1289.60
62	2.339	1340.51	670.25	**87**	4.606	2639.52	1319.76
63	2.416	1384.10	692.05	**88**	4.713	2700.55	1350.27
64	2.493	1428.39	714.19	**89**	4.821	2762.27	1381.14
65	2.571	1473.37	736.69	**90**	4.930	2824.70	1412.35
66	2.651	1519.06	759.53	**91**	5.040	2887.81	1443.91
67	2.732	1565.44	782.72	**92**	5.151	2951.63	1475.82
68	2.814	1612.52	806.26	**93**	5.264	3016.15	1508.07
69	2.898	1660.29	830.15	**94**	5.378	3081.36	1540.68
70	2.982	1708.77	854.38	**95**	5.493	3147.27	1573.63
71	3.068	1757.94	878.97	**96**	5.609	3213.88	1606.94
72	3.155	1807.80	903.90	**97**	5.726	3281.18	1640.59
73	3.243	1858.37	929.19	**98**	5.845	3349.18	1674.59
74	3.333	1909.63	954.82	**99**	5.965	3417.88	1708.94
75	3.423	1961.59	980.80	**100**	6.086	3487.28	1743.64

Table 12 Volume table for *Duabanga grandiflora* (10-30 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)														
	11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
10	0.035	0.038	0.042	0.045	0.048	0.051	0.054	0.058	0.061	0.064	0.067	0.070	0.074	0.077	0.080
11	0.043	0.046	0.050	0.054	0.058	0.062	0.066	0.070	0.074	0.077	0.081	0.085	0.089	0.093	0.097
12	0.051	0.055	0.060	0.065	0.069	0.074	0.078	0.083	0.088	0.092	0.097	0.101	0.106	0.111	0.115
13	0.059	0.065	0.070	0.076	0.081	0.087	0.092	0.097	0.103	0.108	0.114	0.119	0.124	0.130	0.135
14	0.069	0.075	0.082	0.088	0.094	0.100	0.107	0.113	0.119	0.125	0.132	0.138	0.144	0.151	0.157
15	0.079	0.086	0.094	0.101	0.108	0.115	0.122	0.130	0.137	0.144	0.151	0.158	0.166	0.173	0.180
16	0.090	0.098	0.106	0.115	0.123	0.131	0.139	0.147	0.156	0.164	0.172	0.180	0.188	0.197	0.205
17	0.102	0.111	0.120	0.129	0.139	0.148	0.157	0.166	0.176	0.185	0.194	0.203	0.213	0.222	0.231
18	0.114	0.124	0.135	0.145	0.156	0.166	0.176	0.187	0.197	0.207	0.218	0.228	0.238	0.249	0.259
19	0.127	0.139	**0.150**	0.162	0.173	0.185	0.196	0.208	0.219	0.231	0.243	0.254	0.266	0.277	0.289
20	0.141	0.154	**0.166**	0.179	0.192	0.205	0.218	0.230	0.243	0.256	0.269	0.282	0.294	0.307	0.320
21	0.155	0.169	**0.183**	0.198	0.212	0.226	0.240	0.254	0.268	0.282	0.296	0.310	0.325	0.339	0.353
22	0.170	0.186	**0.201**	0.217	0.232	0.248	0.263	0.279	0.294	0.310	0.325	0.341	0.356	0.372	0.387
23	0.186	0.203	**0.220**	**0.237**	**0.254**	**0.271**	0.288	0.305	0.322	0.339	0.355	0.372	0.389	0.406	0.423
24	0.203	**0.221**	**0.240**	**0.258**	**0.276**	**0.295**	0.313	0.332	0.350	0.369	0.387	0.406	0.424	0.442	0.461
25	0.220	**0.240**	**0.260**	**0.280**	**0.300**	**0.320**	**0.340**	**0.360**	**0.380**	**0.400**	0.420	0.440	0.460	0.480	0.500
26	0.238	**0.260**	**0.281**	**0.303**	**0.324**	**0.346**	**0.368**	**0.389**	**0.411**	**0.433**	0.454	0.476	0.498	0.519	0.541
27	0.257	**0.280**	**0.303**	**0.327**	**0.350**	**0.373**	**0.397**	**0.420**	**0.443**	**0.467**	0.490	0.513	0.537	0.560	0.583
28	0.276	**0.301**	**0.326**	**0.351**	**0.376**	**0.401**	**0.426**	**0.452**	**0.477**	**0.502**	0.527	0.552	0.577	0.602	0.627
29	0.296	0.323	0.350	**0.377**	**0.404**	**0.431**	**0.458**	**0.484**	**0.511**	**0.538**	0.565	0.592	0.619	0.646	0.673
30	0.317	0.346	0.374	**0.403**	**0.432**	**0.461**	**0.490**	**0.518**	**0.547**	**0.576**	0.605	0.634	0.662	0.691	0.720

(The values which are bold are within the range of observed data)

Table 13 Volume table for *Duabanga grandiflora* (31-50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	**0.473**	**0.504**	0.536	0.567	0.599	0.630	0.662	0.693	0.725	0.756	0.788	0.820	0.851	0.883	0.914	0.946
32	0.504	**0.537**	**0.571**	**0.605**	**0.638**	0.672	0.705	0.739	0.773	0.806	0.840	0.873	0.907	0.940	0.974	1.008
33	0.536	**0.572**	**0.607**	**0.643**	**0.679**	0.714	0.750	0.786	0.822	0.857	0.893	0.929	0.964	1.000	1.036	1.072
34	0.569	**0.607**	**0.645**	**0.683**	**0.720**	**0.758**	0.796	0.834	0.872	0.910	0.948	0.986	1.024	1.062	1.100	1.138
35	0.603	**0.643**	**0.683**	**0.723**	**0.763**	**0.804**	0.844	0.884	0.924	0.964	1.005	1.045	1.085	1.125	1.165	1.205
36	0.638	0.680	**0.723**	**0.765**	**0.808**	**0.850**	0.893	0.935	0.978	1.020	1.063	1.105	1.148	1.190	1.233	1.275
37	0.674	0.718	**0.763**	**0.808**	**0.853**	**0.898**	0.943	0.988	1.033	1.078	1.123	1.167	1.212	1.257	1.302	1.347
38	0.710	0.758	**0.805**	**0.853**	**0.900**	**0.947**	0.995	**1.042**	**1.089**	**1.137**	1.184	1.231	1.279	1.326	1.374	1.421
39	0.748	0.798	**0.848**	**0.898**	**0.948**	**0.998**	**1.048**	**1.098**	**1.147**	**1.197**	1.247	1.297	1.347	1.397	1.447	1.497
40	0.787	0.840	**0.892**	**0.945**	**0.997**	**1.050**	**1.102**	**1.155**	**1.207**	**1.260**	1.312	1.364	1.417	1.469	1.522	1.574
41	0.827	0.882	**0.937**	**0.992**	**1.048**	**1.103**	**1.158**	**1.213**	**1.268**	**1.323**	1.378	1.434	1.489	1.544	1.599	1.654
42	0.868	0.926	**0.984**	**1.041**	**1.099**	**1.157**	**1.215**	**1.273**	**1.331**	**1.389**	1.446	1.504	1.562	1.620	1.678	1.736
43	0.910	0.970	1.031	**1.092**	**1.152**	**1.213**	**1.274**	**1.334**	**1.395**	**1.456**	1.516	1.577	1.637	1.698	1.759	1.819
44	0.953	1.016	1.080	**1.143**	**1.207**	**1.270**	**1.334**	**1.397**	**1.461**	**1.524**	1.588	1.651	1.715	1.778	1.842	1.905
45	0.996	1.063	1.129	**1.196**	**1.262**	**1.328**	**1.395**	**1.461**	**1.528**	**1.594**	1.661	1.727	1.793	1.860	1.926	1.993
46	1.041	1.110	1.180	**1.249**	**1.319**	**1.388**	**1.458**	**1.527**	**1.596**	**1.666**	1.735	1.805	1.874	1.943	2.013	2.082
47	1.087	1.159	1.232	**1.304**	**1.377**	**1.449**	**1.522**	**1.594**	**1.666**	**1.739**	**1.811**	**1.884**	**1.956**	2.029	2.101	2.174
48	1.134	1.209	1.285	**1.360**	**1.436**	**1.511**	**1.587**	**1.663**	**1.738**	**1.814**	**1.889**	**1.965**	**2.040**	2.116	2.192	2.267
49	1.181	1.260	1.339	**1.418**	**1.496**	**1.575**	**1.654**	**1.733**	**1.811**	**1.890**	**1.969**	**2.048**	**2.126**	2.205	2.284	2.363
50	1.230	1.312	1.394	**1.476**	**1.558**	**1.640**	**1.722**	**1.804**	**1.886**	**1.968**	**2.050**	**2.132**	**2.214**	2.296	2.378	2.460

(The values which are bold are within the range of observed data)

Table 14 Volume table for *Duabanga grandiflora* (>50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	1.116	1.190	1.265	1.339	1.413	1.488	1.562	**1.637**	**1.711**	**1.785**	**1.860**	**1.934**	**2.008**	**2.083**	**2.157**	**2.232**	2.306	2.380	2.455	2.529	2.604
52	1.160	1.237	1.315	1.392	1.469	1.547	1.624	**1.701**	**1.779**	**1.856**	**1.933**	**2.011**	**2.088**	**2.165**	**2.243**	**2.320**	2.397	2.475	2.552	2.629	2.707
53	1.205	1.285	1.366	**1.446**	**1.526**	**1.607**	**1.687**	**1.767**	**1.848**	**1.928**	**2.008**	**2.089**	**2.169**	**2.249**	**2.330**	**2.410**	2.490	2.571	2.651	2.731	2.812
54	1.251	1.334	1.418	**1.501**	**1.585**	**1.668**	**1.751**	**1.835**	**1.918**	**2.002**	**2.085**	**2.168**	**2.252**	**2.335**	**2.419**	**2.502**	2.585	2.669	2.752	2.836	2.919
55	1.298	1.384	1.471	**1.557**	**1.644**	**1.730**	**1.817**	**1.903**	**1.990**	**2.076**	**2.163**	**2.249**	**2.336**	**2.422**	**2.509**	**2.595**	2.682	2.768	2.855	2.942	3.028
56	1.345	1.435	1.525	**1.614**	**1.704**	**1.794**	**1.883**	**1.973**	**2.063**	**2.153**	**2.242**	**2.332**	**2.422**	**2.511**	**2.601**	**2.691**	2.780	2.870	2.960	3.049	3.139
57	1.394	1.487	1.580	**1.673**	**1.766**	**1.858**	**1.951**	**2.044**	**2.137**	**2.230**	**2.323**	**2.416**	**2.509**	**2.602**	**2.695**	**2.788**	2.881	2.973	3.066	3.159	3.252
58	1.443	1.539	1.636	**1.732**	**1.828**	**1.924**	**2.020**	**2.117**	**2.213**	**2.309**	**2.405**	**2.501**	**2.598**	**2.694**	**2.790**	**2.886**	2.983	3.079	3.175	3.271	3.367
59	1.493	1.593	1.692	**1.792**	**1.892**	**1.991**	**2.091**	**2.190**	**2.290**	**2.389**	**2.489**	**2.588**	**2.688**	**2.788**	**2.887**	**2.987**	3.086	3.186	3.285	3.385	3.484
60	1.544	1.647	1.750	**1.853**	**1.956**	**2.059**	**2.162**	**2.265**	**2.368**	**2.471**	**2.574**	**2.677**	**2.780**	**2.883**	**2.986**	**3.089**	3.192	3.295	3.398	3.501	3.604
61	1.596	1.703	1.809	**1.916**	**2.022**	**2.128**	**2.235**	**2.341**	**2.448**	**2.554**	**2.661**	**2.767**	**2.873**	**2.980**	**3.086**	**3.193**	3.299	3.405	3.512	3.618	3.725
62	1.649	1.759	1.869	**1.979**	**2.089**	**2.199**	**2.309**	**2.419**	**2.529**	**2.639**	**2.748**	**2.858**	**2.968**	**3.078**	**3.188**	**3.298**	3.408	3.518	3.628	3.738	3.848
63	1.703	1.816	1.930	**2.043**	**2.157**	**2.270**	**2.384**	**2.497**	**2.611**	**2.724**	**2.838**	**2.951**	**3.065**	**3.178**	**3.292**	**3.405**	3.519	3.632	3.746	3.859	3.973
64	1.757	1.874	1.991	**2.109**	**2.226**	**2.343**	**2.460**	**2.577**	**2.694**	**2.811**	**2.929**	**3.046**	**3.163**	**3.280**	**3.397**	**3.514**	3.632	3.749	3.866	3.983	4.100
65	1.813	1.933	2.054	**2.175**	**2.296**	**2.417**	**2.538**	**2.658**	**2.779**	**2.900**	**3.021**	**3.142**	**3.263**	**3.383**	**3.504**	**3.625**	3.746	3.867	3.988	4.108	4.229
66	1.869	1.993	2.118	**2.242**	**2.367**	**2.492**	**2.616**	**2.741**	**2.865**	**2.990**	**3.115**	**3.239**	**3.364**	**3.488**	**3.613**	**3.737**	3.862	3.987	4.111	4.236	4.360
67	1.926	2.054	2.183	**2.311**	**2.439**	**2.568**	**2.696**	**2.824**	**2.953**	**3.081**	**3.210**	**3.338**	**3.466**	**3.595**	**3.723**	**3.852**	3.980	4.108	4.237	4.365	4.493
68	1.984	2.116	2.248	**2.380**	**2.513**	**2.645**	**2.777**	**2.909**	**3.042**	**3.174**	**3.306**	**3.438**	**3.571**	**3.703**	**3.835**	**3.967**	4.100	4.232	4.364	4.496	4.629
69	2.042	2.179	2.315	**2.451**	**2.587**	**2.723**	**2.859**	**2.996**	**3.132**	**3.268**	**3.404**	**3.540**	**3.676**	**3.813**	**3.949**	**4.085**	4.221	4.357	4.493	4.630	4.766
70	2.102	2.242	2.382	**2.523**	**2.663**	**2.803**	**2.943**	**3.083**	**3.223**	**3.363**	**3.504**	**3.644**	**3.784**	**3.924**	**4.064**	**4.204**	4.344	4.484	4.625	4.765	4.905

(The values which are bold are within the range of observed data)

Table 15 Biomass table for *Duabanga grandiflora* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	13.45	14.67	15.89	17.11	18.34	19.56	20.78	22.00	23.23	24.45	25.67	26.89	28.12	29.34	30.56
11	16.27	17.75	19.23	20.71	22.19	23.67	25.14	26.62	28.10	29.58	31.06	32.54	34.02	35.50	36.98
12	19.36	21.12	22.88	24.64	26.40	28.16	29.92	31.68	33.44	35.21	36.97	38.73	40.49	42.25	44.01
13	22.72	24.79	26.86	28.92	30.99	33.05	35.12	37.19	39.25	41.32	43.38	45.45	47.51	49.58	51.65
14	26.35	28.75	31.15	33.54	35.94	38.33	40.73	43.13	45.52	47.92	50.31	52.71	55.11	57.50	59.90
15	30.25	33.00	35.76	38.51	41.26	44.01	46.76	49.51	52.26	55.01	57.76	60.51	63.26	66.01	68.76
16	34.42	37.55	40.68	43.81	46.94	50.07	53.20	56.33	59.46	62.59	65.72	68.85	71.97	75.10	78.23
17	38.86	42.39	45.93	49.46	52.99	56.52	60.06	63.59	67.12	70.65	74.19	77.72	81.25	84.79	88.32
18	43.57	47.53	51.49	55.45	59.41	63.37	67.33	71.29	75.25	79.21	83.17	87.13	91.09	95.05	99.01
19	48.54	52.95	57.37	61.78	66.19	70.61	75.02	79.43	83.84	88.26	92.67	97.08	101.50	105.91	110.32
20	53.79	58.68	63.56	68.45	73.34	78.23	83.12	88.01	92.90	97.79	102.68	107.57	112.46	117.35	122.24
21	59.30	64.69	70.08	75.47	80.86	86.25	91.64	97.03	102.42	107.82	113.21	118.60	123.99	129.38	134.77
22	65.08	71.00	76.91	82.83	88.75	94.66	100.58	106.50	112.41	118.33	124.24	130.16	136.08	141.99	147.91
23	71.13	77.60	84.06	90.53	97.00	103.46	109.93	116.40	122.86	129.33	135.80	142.26	148.73	155.20	161.66
24	77.45	84.49	91.53	98.57	105.62	112.66	119.70	126.74	133.78	140.82	147.86	154.90	161.94	168.98	176.03
25	84.04	91.68	99.32	106.96	114.60	122.24	129.88	137.52	145.16	152.80	160.44	168.08	175.72	183.36	191.00
26	90.90	99.16	107.42	115.69	123.95	132.21	140.48	148.74	157.01	165.27	173.53	181.80	190.06	198.32	206.59
27	98.02	106.94	115.85	124.76	133.67	142.58	151.49	160.40	169.31	178.23	187.14	196.05	204.96	213.87	222.78
28	105.42	115.00	124.59	134.17	143.75	153.34	162.92	172.51	182.09	191.67	201.26	210.84	220.42	230.01	239.59
29	113.08	123.36	133.64	143.93	154.21	164.49	174.77	185.05	195.33	205.61	215.89	226.17	236.45	246.73	257.01
30	121.02	132.02	143.02	154.02	165.02	176.03	187.03	198.03	209.03	220.03	231.03	242.04	253.04	264.04	275.04

Table 16 Biomass table for *Duabanga grandiflora* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	180.61	192.66	204.70	216.74	228.78	240.82	252.86	264.90	276.94	288.98	301.81	313.06	325.11	337.15	349.19	361.23
32	192.45	205.28	218.12	230.95	243.78	256.61	269.44	282.27	295.10	307.93	321.60	333.59	346.42	359.25	372.08	384.91
33	204.67	218.32	231.96	245.61	259.25	272.89	286.54	300.18	313.83	327.47	342.01	354.76	368.41	382.05	395.70	409.34
34	217.26	231.75	246.23	260.72	275.20	289.68	304.17	318.65	333.14	347.62	363.05	376.59	391.07	405.56	420.04	434.53
35	230.23	245.58	260.93	276.28	291.63	306.98	322.32	337.67	353.02	368.37	384.72	399.07	414.42	429.77	445.11	460.46
36	243.58	259.81	276.05	292.29	308.53	324.77	341.01	357.24	373.48	389.72	407.02	422.20	438.44	454.67	470.91	487.15
37	257.30	274.45	291.60	308.75	325.91	343.06	360.21	377.37	394.52	411.67	429.95	445.98	463.13	480.28	497.44	514.59
38	271.39	289.48	307.58	325.67	343.76	361.85	379.95	398.04	416.13	434.23	453.50	470.41	488.50	506.60	524.69	542.78
39	285.86	304.92	323.98	343.04	362.09	381.15	400.21	419.27	438.32	457.38	477.69	495.50	514.55	533.61	552.67	571.73
40	300.71	320.76	340.81	360.85	380.90	400.95	420.99	441.04	461.09	481.14	502.50	521.23	541.28	561.33	581.37	601.42
41	315.93	337.00	358.06	379.12	400.18	421.25	442.31	463.37	484.43	505.49	527.93	547.62	568.68	589.74	610.81	631.87
42	331.53	353.64	375.74	397.84	419.94	442.04	464.15	486.25	508.35	530.45	554.00	574.66	596.76	618.86	640.96	663.07
43	347.51	370.68	393.84	417.01	440.18	463.34	486.51	509.68	532.85	556.01	580.70	602.35	625.52	648.68	671.85	695.02
44	363.86	388.12	412.37	436.63	460.89	485.15	509.40	533.66	557.92	582.18	608.02	630.69	654.95	679.20	703.46	727.72
45	380.59	405.96	431.33	456.70	482.08	507.45	532.82	558.19	583.57	608.94	635.97	659.68	685.06	710.43	735.80	761.17
46	397.69	424.20	450.71	477.23	503.74	530.25	556.77	583.28	609.79	636.30	664.55	689.33	715.84	742.35	768.87	795.38
47	415.17	442.85	470.52	498.20	525.88	553.56	581.24	608.91	636.59	664.27	693.76	719.63	747.30	774.98	802.66	830.34
48	433.02	461.89	490.76	519.63	548.50	577.36	606.23	635.10	663.97	692.84	723.59	750.57	779.44	808.31	837.18	866.05
49	451.25	481.34	511.42	541.50	571.59	601.67	631.75	661.84	691.92	722.01	754.06	782.17	812.26	842.34	872.42	902.51
50	469.86	501.18	532.51	563.83	595.16	626.48	657.80	689.13	720.45	751.78	785.15	814.42	845.75	877.07	908.40	939.72

Table 17 Biomass table for *Duabanga grandiflora* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	426.25	454.66	483.08	511.50	539.91	568.33	596.75	625.16	653.58	681.99	710.41	738.83	767.24	795.66	824.08	852.49	880.91	909.33	966.16	966.16	994.58
52	443.13	472.67	502.21	531.75	561.29	590.83	620.38	649.92	679.46	709.00	738.54	768.09	797.63	827.17	856.71	886.25	915.79	945.34	1004.42	1004.42	1033.96
53	460.33	491.02	521.71	552.40	583.09	613.78	644.47	675.16	705.84	736.53	767.22	797.91	828.60	859.29	889.98	920.67	951.36	982.04	1043.42	1043.42	1074.11
54	477.87	509.73	541.58	573.44	605.30	637.16	669.02	700.87	732.73	764.59	796.45	828.30	860.16	892.02	923.88	955.74	987.59	1019.45	1083.17	1083.17	1115.03
55	495.73	528.78	561.83	594.88	627.93	660.97	694.02	727.07	760.12	793.17	826.22	859.27	892.32	925.36	958.41	991.46	1024.51	1057.56	1123.66	1123.66	1156.71
56	513.92	548.18	582.44	616.71	650.97	685.23	719.49	753.75	788.01	822.27	856.54	890.80	925.06	959.32	993.58	1027.84	1062.10	1096.37	1164.89	1164.89	1199.15
57	532.44	567.94	603.43	638.93	674.42	709.92	745.42	780.91	816.41	851.90	887.40	922.90	958.39	993.89	1029.38	1064.88	1100.38	1135.87	1206.86	1206.86	1242.36
58	551.29	588.04	624.79	661.54	698.30	735.05	771.80	808.55	845.30	882.06	918.81	955.56	992.31	1029.07	1065.82	1102.57	1139.32	1176.08	1249.58	1249.58	1286.33
59	570.46	608.49	646.52	684.55	722.58	760.61	798.64	836.67	874.70	912.73	950.77	988.80	1026.83	1064.86	1102.89	1140.92	1178.95	1216.98	1293.04	1293.04	1331.07
60	589.96	629.29	668.62	707.95	747.28	786.61	825.95	865.28	904.61	943.94	983.27	1022.60	1061.93	1101.26	1140.59	1179.92	1219.25	1258.58	1337.24	1337.24	1376.58
61	609.79	650.44	691.10	731.75	772.40	813.05	853.71	894.36	935.01	975.66	1016.32	1056.97	1097.62	1138.27	1178.93	1219.58	1260.23	1300.89	1382.19	1382.19	1422.84
62	629.95	671.94	713.94	755.94	797.93	839.93	881.93	923.92	965.92	1007.92	1049.91	1091.91	1133.90	1175.90	1217.90	1259.89	1301.89	1343.89	1427.88	1427.88	1469.88
63	650.43	693.79	737.16	780.52	823.88	867.24	910.60	953.97	997.33	1040.69	1084.05	1127.42	1170.78	1214.14	1257.50	1300.86	1344.23	1387.59	1474.31	1474.31	1517.67
64	671.24	715.99	760.74	805.49	850.24	894.99	939.74	984.49	1029.24	1073.99	1118.74	1163.49	1208.24	1252.99	1297.74	1342.49	1387.24	1431.99	1521.49	1521.49	1566.24
65	692.38	738.54	784.70	830.86	877.02	923.18	969.34	1015.50	1061.66	1107.82	1153.97	1200.13	1246.29	1292.45	1338.61	1384.77	1430.93	1477.09	1569.40	1569.40	1615.56
66	713.85	761.44	809.03	856.62	904.21	951.80	999.39	1046.98	1094.57	1142.16	1189.75	1237.34	1284.93	1332.52	1380.11	1427.71	1475.30	1522.89	1618.07	1618.07	1665.66
67	735.65	784.69	833.73	882.78	931.82	980.86	1029.91	1078.95	1127.99	1177.04	1226.08	1275.12	1324.17	1373.21	1422.25	1471.30	1520.34	1569.38	1667.47	1667.47	1716.51
68	757.77	808.29	858.81	909.33	959.84	1010.36	1060.88	1111.40	1161.92	1212.43	1262.95	1313.47	1363.99	1414.51	1465.03	1515.54	1566.06	1616.58	1717.62	1717.62	1768.13
69	780.22	832.24	884.25	936.27	988.28	1040.30	1092.31	1144.33	1196.34	1248.36	1300.37	1352.39	1404.40	1456.42	1508.43	1560.45	1612.46	1664.48	1768.51	1768.51	1820.52
70	803.00	856.54	910.07	963.60	1017.14	1070.67	1124.20	1177.74	1231.27	1284.80	1338.34	1391.87	1445.40	1498.94	1552.47	1606.00	1659.54	1713.07	1820.14	1820.14	1873.67

Table 18 Carbon table for *Duabanga grandiflora* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	6.72	7.33	7.95	8.56	9.17	9.78	10.39	11.00	11.61	12.22	12.84	13.45	14.06	14.67	15.28
11	8.14	8.87	9.61	10.35	11.09	11.83	12.57	13.31	14.05	14.79	15.53	16.27	17.01	17.75	18.49
12	9.68	10.56	11.44	12.32	13.20	14.08	14.96	15.84	16.72	17.60	18.48	19.36	20.24	21.12	22.00
13	11.36	12.40	13.43	14.46	15.49	16.53	17.56	18.59	19.63	20.66	21.69	22.72	23.76	24.79	25.82
14	13.18	14.38	15.57	16.77	17.97	19.17	20.37	21.56	22.76	23.96	25.16	26.35	27.55	28.75	29.95
15	15.13	16.50	17.88	19.25	20.63	22.00	23.38	24.75	26.13	27.50	28.88	30.25	31.63	33.00	34.38
16	17.21	18.78	20.34	21.91	23.47	25.03	26.60	28.16	29.73	31.29	32.86	34.42	35.99	37.55	39.12
17	19.43	21.20	22.96	24.73	26.50	28.26	30.03	31.79	33.56	35.33	37.09	38.86	40.63	42.39	44.16
18	21.78	23.76	25.74	27.72	29.70	31.68	33.66	35.65	37.63	39.61	41.59	43.57	45.55	47.53	49.51
19	24.27	26.48	28.68	30.89	33.10	35.30	37.51	39.72	41.92	44.13	46.34	48.54	50.75	52.95	55.16
20	26.89	29.34	31.78	34.23	36.67	39.12	41.56	44.01	46.45	48.90	51.34	53.79	56.23	58.68	61.12
21	29.65	32.34	35.04	37.74	40.43	43.13	45.82	48.52	51.21	53.91	56.60	59.30	61.99	64.69	67.38
22	32.54	35.50	38.46	41.41	44.37	47.33	50.29	53.25	56.21	59.16	62.12	65.08	68.04	71.00	73.96
23	35.57	38.80	42.03	45.27	48.50	51.73	54.97	58.20	61.43	64.66	67.90	71.13	74.36	77.60	80.83
24	38.73	42.25	45.77	49.29	52.81	56.33	59.85	63.37	66.89	70.41	73.93	77.45	80.97	84.49	88.01
25	42.02	45.84	49.66	53.48	57.30	61.12	64.94	68.76	72.58	76.40	80.22	84.04	87.86	91.68	95.50
26	45.45	49.58	53.71	57.84	61.98	66.11	70.24	74.37	78.50	82.63	86.77	90.90	95.03	99.16	103.29
27	49.01	53.47	57.92	62.38	66.83	71.29	75.75	80.20	84.66	89.11	93.57	98.02	102.48	106.94	111.39
28	52.71	57.50	62.29	67.09	71.88	76.67	81.46	86.25	91.04	95.84	100.63	105.42	110.21	115.00	119.80
29	56.54	61.68	66.82	71.96	77.10	82.24	87.38	92.52	97.66	102.80	107.94	113.08	118.22	123.36	128.50
30	60.51	66.01	71.51	77.01	82.51	88.01	93.51	99.01	104.52	110.02	115.52	121.02	126.52	132.02	137.52

Table 19 Carbon table for *Duabanga grandiflora* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	90.31	96.33	102.35	108.37	114.39	120.41	126.43	132.45	138.47	144.49	150.51	156.53	162.55	168.57	174.59	180.61
32	96.23	102.64	109.06	115.47	121.89	128.30	134.72	141.13	147.55	153.96	160.38	166.79	173.21	179.62	186.04	192.45
33	102.34	109.16	115.98	122.80	129.62	136.45	143.27	150.09	156.91	163.74	170.56	177.38	184.20	191.03	197.85	204.67
34	108.63	115.87	123.12	130.36	137.60	144.84	152.08	159.33	166.57	173.81	181.05	188.29	195.54	202.78	210.02	217.26
35	115.12	122.79	130.46	138.14	145.81	153.49	161.16	168.84	176.51	184.19	191.86	199.53	207.21	214.88	222.56	230.23
36	121.79	129.91	138.03	146.15	154.26	162.38	170.50	178.62	186.74	194.86	202.98	211.10	219.22	227.34	235.46	243.58
37	128.65	137.22	145.80	154.38	162.95	171.53	180.11	188.68	197.26	205.84	214.41	222.99	231.57	240.14	248.72	257.30
38	135.70	144.74	153.79	162.83	171.88	180.93	189.97	199.02	208.07	217.11	226.16	235.21	244.25	253.30	262.34	271.39
39	142.93	152.46	161.99	171.52	181.05	190.58	200.10	209.63	219.16	228.69	238.22	247.75	257.28	266.81	276.33	285.86
40	150.36	160.38	170.40	180.43	190.45	200.47	210.50	220.52	230.54	240.57	250.59	260.62	270.64	280.66	290.69	300.71
41	157.97	168.50	179.03	189.56	200.09	210.62	221.15	231.68	242.22	252.75	263.28	273.81	284.34	294.87	305.40	315.93
42	165.77	176.82	187.87	198.92	209.97	221.02	232.07	243.12	254.18	265.23	276.28	287.33	298.38	309.43	320.48	331.53
43	173.75	185.34	196.92	208.51	220.09	231.67	243.26	254.84	266.42	278.01	289.59	301.17	312.76	324.34	335.92	347.51
44	181.93	194.06	206.19	218.32	230.44	242.57	254.70	266.83	278.96	291.09	303.22	315.34	327.47	339.60	351.73	363.86
45	190.29	202.98	215.67	228.35	241.04	253.72	266.41	279.10	291.78	304.47	317.16	329.84	342.53	355.21	367.90	380.59
46	198.84	212.10	225.36	238.61	251.87	265.13	278.38	291.64	304.90	318.15	331.41	344.66	357.92	371.18	384.43	397.69
47	207.58	221.42	235.26	249.10	262.94	276.78	290.62	304.46	318.30	332.13	345.97	359.81	373.65	387.49	401.33	415.17
48	216.51	230.95	245.38	259.81	274.25	288.68	303.12	317.55	331.98	346.42	360.85	375.29	389.72	404.15	418.59	433.02
49	225.63	240.67	255.71	270.75	285.79	300.84	315.88	330.92	345.96	361.00	376.04	391.09	406.13	421.17	436.21	451.25
50	234.93	250.59	266.25	281.92	297.58	313.24	328.90	344.56	360.23	375.89	391.55	407.21	422.87	438.54	454.20	469.86

Table 20 Carbon table for *Duabanga grandiflora* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	213.12	227.33	241.54	255.75	269.96	284.16	298.37	312.58	326.79	341.00	355.21	369.41	383.62	397.83	412.04	426.25	440.45	454.66	468.87	483.08	497.29
52	221.56	236.33	251.10	265.88	280.65	295.42	310.19	324.96	339.73	354.50	369.27	384.04	398.81	413.58	428.36	443.13	457.90	472.67	487.44	502.21	516.98
53	230.17	245.51	260.86	276.20	291.54	306.89	322.23	337.58	352.92	368.27	383.61	398.96	414.30	429.64	444.99	460.33	475.68	491.02	506.37	521.71	537.06
54	238.93	254.86	270.79	286.72	302.65	318.58	334.51	350.44	366.37	382.29	398.22	414.15	430.08	446.01	461.94	477.87	493.80	509.73	525.66	541.58	557.51
55	247.87	264.39	280.91	297.44	313.96	330.49	347.01	363.54	380.06	396.58	413.11	429.63	446.16	462.68	479.21	495.73	512.26	528.78	545.30	561.83	578.35
56	256.96	274.09	291.22	308.35	325.48	342.61	359.74	376.88	394.01	411.14	428.27	445.40	462.53	479.66	496.79	513.92	531.05	548.18	565.31	582.44	599.57
57	266.22	283.97	301.72	319.46	337.21	354.96	372.71	390.46	408.20	425.95	443.70	461.45	479.20	496.94	514.69	532.44	550.19	567.94	585.68	603.43	621.18
58	275.64	294.02	312.40	330.77	349.15	367.52	385.90	404.28	422.65	441.03	459.40	477.78	496.16	514.53	532.91	551.29	569.66	588.04	606.41	624.79	643.17
59	285.23	304.24	323.26	342.28	361.29	380.31	399.32	418.34	437.35	456.37	475.38	494.40	513.41	532.43	551.44	570.46	589.47	608.49	627.51	646.52	665.54
60	294.98	314.65	334.31	353.98	373.64	393.31	412.97	432.64	452.30	471.97	491.63	511.30	530.96	550.63	570.30	589.96	609.63	629.29	648.96	668.62	688.29
61	304.90	325.22	345.55	365.87	386.20	406.53	426.85	447.18	467.51	487.83	508.16	528.48	548.81	569.14	589.46	609.79	630.12	650.44	670.77	691.10	711.42
62	314.97	335.97	356.97	377.97	398.97	419.96	440.96	461.96	482.96	503.96	524.96	545.95	566.95	587.95	608.95	629.95	650.95	671.94	692.94	713.94	734.94
63	325.22	346.90	368.58	390.26	411.94	433.62	455.30	476.98	498.66	520.35	542.03	563.71	585.39	607.07	628.75	650.43	672.11	693.79	715.47	737.16	758.84
64	335.62	358.00	380.37	402.75	425.12	447.50	469.87	492.25	514.62	537.00	559.37	581.75	604.12	626.49	648.87	671.24	693.62	715.99	738.37	760.74	783.12
65	346.19	369.27	392.35	415.43	438.51	461.59	484.67	507.75	530.83	553.91	576.99	600.07	623.15	646.23	669.31	692.38	715.46	738.54	761.62	784.70	807.78
66	356.93	380.72	404.52	428.31	452.11	475.90	499.70	523.49	547.29	571.08	594.88	618.67	642.47	666.26	690.06	713.85	737.65	761.44	785.24	809.03	832.83
67	367.82	392.35	416.87	441.39	465.91	490.43	514.95	539.48	564.00	588.52	613.04	637.56	662.08	686.61	711.13	735.65	760.17	784.69	809.21	833.73	858.26
68	378.89	404.14	429.40	454.66	479.92	505.18	530.44	555.70	580.96	606.22	631.48	656.74	681.99	707.25	732.51	757.77	783.03	808.29	833.55	858.81	884.07
69	390.11	416.12	442.13	468.13	494.14	520.15	546.16	572.16	598.17	624.18	650.19	676.19	702.20	728.21	754.22	780.22	806.23	832.24	858.25	884.25	910.26
70	401.50	428.27	455.03	481.80	508.57	535.33	562.10	588.87	615.64	642.40	669.17	695.94	722.70	749.47	776.24	803.00	829.77	856.54	883.30	910.07	936.84

Table 21 Volume, biomass and carbon table for *Duabanga grandiflora* (DBH 10 -50 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
10	0.049	18.82	9.41	**31**	0.690	263.47	131.73
11	0.060	22.77	11.38	**32**	0.735	280.74	140.37
12	0.071	27.10	13.55	**33**	0.782	298.56	149.28
13	0.083	31.80	15.90	**34**	0.830	316.93	158.47
14	0.097	36.88	18.44	**35**	0.879	335.85	167.92
15	0.111	42.34	21.17	**36**	0.930	355.31	177.66
16	0.126	48.17	24.09	**37**	0.983	375.33	187.66
17	0.142	54.38	27.19	**38**	1.036	395.89	197.94
18	0.160	60.97	30.48	**39**	1.092	417.00	208.50
19	0.178	67.93	33.97	**40**	1.148	438.66	219.33
20	0.197	75.27	37.63	**41**	1.206	460.87	230.43
21	0.217	82.98	41.49	**42**	1.266	483.62	241.81
22	0.238	91.08	45.54	**43**	1.327	506.92	253.46
23	0.261	99.54	49.77	**44**	1.389	530.78	265.39
24	0.284	108.39	54.19	**45**	1.453	555.18	277.59
25	0.308	117.61	58.80	**46**	1.519	580.13	290.06
26	0.333	127.21	63.60	**47**	1.585	605.62	302.81
27	0.359	137.18	68.59	**48**	1.654	631.67	315.83
28	0.386	147.53	73.76	**49**	1.723	658.26	329.13
29	0.414	158.25	79.13	**50**	1.794	685.40	342.70
30	0.443	169.36	84.68	**51**			

Table 22 Volume, biomass and carbon table for *Duabanga grandiflora* (DBH 51-100 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
51	2.052	783.84	391.92	**76**	4.557	1740.65	870.33
52	2.133	814.88	407.44	**77**	4.677	1786.76	893.38
53	2.216	846.52	423.26	**78**	4.800	1833.47	916.74
54	2.300	878.77	439.38	**79**	4.924	1880.79	940.39
55	2.386	911.61	455.81	**80**	5.049	1928.70	964.35
56	2.474	945.06	472.53	**81**	5.176	1977.22	988.61
57	2.563	979.12	489.56	**82**	5.305	2026.34	1013.17
58	2.654	1013.77	506.89	**83**	5.435	2076.07	1038.03
69	2.746	1049.03	524.52	**84**	5.566	2126.39	1063.20
60	2.840	1084.90	542.45	**85**	5.700	2177.32	1088.66
61	2.935	1121.36	560.68	**86**	5.835	2228.86	1114.43
62	3.033	1158.43	579.21	**87**	5.971	2280.99	1140.50
63	3.131	1196.10	598.05	**88**	6.109	2333.73	1166.87
64	3.231	1234.37	617.18	**89**	6.249	2387.07	1193.54
65	3.333	1273.25	636.62	**90**	6.390	2441.01	1220.51
66	3.436	1312.72	656.36	**91**	6.533	2495.56	1247.78
67	3.541	1352.80	676.40	**92**	6.677	2550.71	1275.35
68	3.648	1393.49	696.74	**93**	6.823	2606.46	1303.23
69	3.756	1434.77	717.39	**94**	6.971	2662.82	1331.41
70	3.866	1476.66	738.33	**95**	7.120	2719.77	1359.89
71	3.977	1519.15	759.58	**96**	7.271	2777.33	1388.67
72	4.090	1562.25	781.12	**97**	7.423	2835.49	1417.75
73	4.204	1605.95	802.97	**98**	7.577	2894.26	1447.13
74	4.320	1650.25	825.12	**99**	7.732	2953.63	1476.81
75	4.438	1695.15	847.57	**100**	7.889	3013.60	1506.80

Table 23 Volume table for *Magnolia champaca* (10-30 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)														
	11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
10	0.036	0.039	0.043	0.046	0.049	0.052	0.056	0.059	0.062	0.065	0.069	0.072	0.075	0.078	0.082
11	0.044	0.047	0.051	0.055	0.059	0.063	0.067	0.071	0.075	0.079	0.083	0.087	0.091	0.095	0.099
12	0.052	0.057	0.061	0.066	0.071	0.075	0.080	0.085	0.089	0.094	0.099	0.104	0.108	0.113	0.118
13	0.061	0.066	0.072	0.077	0.083	0.088	0.094	0.099	0.105	0.111	0.116	0.122	0.127	0.133	0.138
14	0.071	0.077	0.083	0.090	0.096	0.103	0.109	0.115	0.122	0.128	0.135	0.141	0.147	0.154	0.160
15	0.081	**0.088**	0.096	0.103	0.110	0.118	0.125	0.132	0.140	0.147	0.155	0.162	0.169	0.177	0.184
16	**0.092**	**0.100**	0.109	0.117	0.126	0.134	0.142	0.151	0.159	0.167	0.176	0.184	0.193	0.201	0.209
17	**0.104**	**0.113**	0.123	0.132	0.142	0.151	0.161	0.170	0.180	0.189	0.198	0.208	0.217	0.227	0.236
18	**0.117**	**0.127**	0.138	0.148	0.159	0.170	0.180	0.191	0.201	0.212	0.222	0.233	0.244	0.254	0.265
19	0.130	**0.142**	**0.153**	**0.165**	0.177	0.189	0.201	0.212	0.224	0.236	0.248	0.260	0.272	0.283	0.295
20	0.144	**0.157**	**0.170**	**0.183**	**0.196**	**0.209**	**0.222**	**0.235**	**0.249**	**0.262**	**0.275**	0.288	0.301	0.314	0.327
21	0.159	**0.173**	**0.187**	**0.202**	**0.216**	**0.231**	**0.245**	**0.260**	**0.274**	**0.288**	**0.303**	0.317	0.332	0.346	0.361
22	0.174	**0.190**	**0.206**	**0.222**	**0.237**	**0.253**	**0.269**	**0.285**	**0.301**	**0.317**	**0.332**	0.348	0.364	0.380	0.396
23	0.190	**0.208**	**0.225**	**0.242**	**0.259**	**0.277**	**0.294**	**0.311**	**0.329**	**0.346**	**0.363**	0.381	0.398	0.415	0.432
24	0.207	**0.226**	**0.245**	**0.264**	**0.283**	**0.301**	**0.320**	**0.339**	**0.358**	**0.377**	**0.396**	**0.414**	**0.433**	0.452	0.471
25	0.225	**0.245**	**0.266**	**0.286**	**0.307**	**0.327**	**0.347**	**0.368**	**0.388**	**0.409**	**0.429**	**0.450**	**0.470**	0.491	0.511
26	0.243	0.265	**0.287**	**0.309**	**0.332**	**0.354**	**0.376**	**0.398**	**0.420**	**0.442**	**0.464**	**0.486**	**0.508**	0.531	0.553
27	0.262	0.286	**0.310**	**0.334**	**0.358**	**0.381**	**0.405**	**0.429**	**0.453**	**0.477**	**0.501**	**0.524**	**0.548**	**0.572**	**0.596**
28	0.282	0.308	0.333	**0.359**	**0.385**	**0.410**	**0.436**	**0.461**	**0.487**	**0.513**	**0.538**	**0.564**	**0.590**	**0.615**	**0.641**
29	0.303	0.330	0.358	**0.385**	**0.413**	**0.440**	**0.468**	**0.495**	**0.523**	**0.550**	**0.578**	**0.605**	**0.633**	**0.660**	**0.688**
30	0.324	0.353	0.383	0.412	**0.441**	**0.471**	**0.500**	**0.530**	**0.559**	**0.589**	**0.618**	**0.647**	**0.677**	**0.706**	**0.736**

(The values which are bold are within the range of observed data)

Table 24 Volume table for *Magnolia champaca* (31-50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	**0.392**	**0.418**	**0.444**	**0.471**	**0.497**	**0.523**	**0.549**	**0.575**	**0.601**	**0.627**	0.653	0.680	0.706	0.732	0.758	0.784
32	**0.418**	**0.446**	**0.473**	**0.501**	**0.529**	**0.557**	**0.585**	**0.613**	**0.641**	**0.668**	0.696	0.724	0.752	0.780	0.808	0.836
33	**0.444**	**0.474**	**0.504**	**0.533**	**0.563**	**0.592**	**0.622**	**0.652**	**0.681**	**0.711**	**0.741**	**0.770**	0.800	0.829	0.859	0.889
34	**0.472**	**0.503**	**0.535**	**0.566**	**0.597**	**0.629**	**0.660**	**0.692**	**0.723**	**0.755**	**0.786**	**0.818**	0.849	0.880	0.912	0.943
35	**0.500**	**0.533**	**0.566**	**0.600**	**0.633**	**0.666**	**0.700**	**0.733**	**0.766**	**0.800**	**0.833**	**0.866**	0.900	0.933	0.966	1.000
36	0.529	0.564	0.599	0.635	0.670	**0.705**	**0.740**	**0.776**	**0.811**	**0.846**	**0.881**	**0.917**	**0.952**	**0.987**	1.022	1.058
37	0.559	0.596	0.633	0.670	0.707	**0.745**	**0.782**	**0.819**	**0.856**	**0.894**	**0.931**	**0.968**	**1.005**	**1.043**	1.080	1.117
38	0.589	0.628	0.668	0.707	0.746	**0.786**	**0.825**	**0.864**	**0.903**	**0.943**	**0.982**	**1.021**	**1.060**	**1.100**	1.139	1.178
39	0.621	0.662	0.703	0.745	0.786	**0.827**	**0.869**	**0.910**	**0.952**	**0.993**	**1.034**	**1.076**	**1.117**	**1.158**	1.200	1.241
40	0.653	0.696	0.740	0.783	0.827	**0.870**	**0.914**	**0.957**	**1.001**	**1.044**	**1.088**	**1.132**	**1.175**	**1.219**	1.262	1.306
41	0.686	0.732	0.777	0.823	0.869	**0.914**	**0.960**	**1.006**	**1.052**	**1.097**	**1.143**	**1.189**	**1.235**	**1.280**	1.326	1.372
42	0.720	0.768	0.816	0.864	0.912	**0.960**	**1.008**	**1.056**	**1.104**	**1.152**	**1.200**	**1.248**	**1.295**	**1.343**	1.391	1.439
43	0.754	0.805	0.855	0.905	0.956	1.006	1.056	1.106	**1.157**	**1.207**	**1.257**	**1.308**	**1.358**	**1.408**	1.458	1.509
44	0.790	0.843	0.895	0.948	1.001	1.053	1.106	1.159	**1.211**	**1.264**	**1.316**	**1.369**	**1.422**	**1.474**	1.527	1.580
45	0.826	0.881	0.936	0.991	1.047	1.102	1.157	1.212	**1.267**	**1.322**	**1.377**	**1.432**	**1.487**	**1.542**	1.597	1.652
46	0.863	0.921	0.978	1.036	1.094	1.151	1.209	1.266	1.324	1.381	1.439	1.496	1.554	1.612	1.669	1.727
47	0.901	0.961	1.021	1.082	1.142	1.202	1.262	1.322	1.382	1.442	1.502	1.562	1.622	1.682	1.742	1.803
48	0.940	1.003	1.065	1.128	1.191	1.253	1.316	1.379	1.441	1.504	1.567	1.629	1.692	1.755	1.817	1.880
49	0.980	1.045	1.110	1.176	1.241	1.306	1.371	1.437	1.502	1.567	1.633	1.698	1.763	1.829	1.894	1.959
50	1.020	1.088	1.156	1.224	1.292	1.360	1.428	1.496	1.564	1.632	1.700	1.768	1.836	1.904	1.972	2.040

(The values which are bold are within the range of observed data)

Table 25 Volume table for *Magnolia champaca* (>50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	1.034	1.103	1.172	**1.241**	**1.310**	**1.379**	**1.447**	**1.516**	**1.585**	**1.654**	**1.723**	1.792	1.861	1.930	1.999	2.068	2.137	2.206	2.275	2.344	2.412
52	1.075	1.146	1.218	**1.290**	**1.361**	**1.433**	**1.505**	**1.576**	**1.648**	**1.720**	**1.791**	1.863	1.935	2.006	2.078	2.150	2.221	2.293	2.365	2.436	2.508
53	1.117	1.191	1.265	**1.340**	**1.414**	**1.489**	**1.563**	**1.638**	**1.712**	**1.787**	**1.861**	1.935	2.010	2.084	2.159	2.233	2.308	2.382	2.456	2.531	2.605
54	1.159	1.236	1.314	**1.391**	**1.468**	**1.545**	**1.623**	**1.700**	**1.777**	**1.855**	**1.932**	2.009	2.086	2.164	2.241	2.318	2.395	2.473	2.550	2.627	2.705
55	1.202	1.283	1.363	**1.443**	**1.523**	**1.603**	**1.683**	**1.764**	**1.844**	**1.924**	**2.004**	2.084	2.164	2.245	2.325	2.405	2.485	2.565	2.645	2.726	2.806
56	1.247	1.330	1.413	**1.496**	**1.579**	**1.662**	**1.745**	**1.828**	**1.911**	**1.994**	**2.078**	2.161	2.244	2.327	2.410	2.493	2.576	2.659	2.742	2.826	2.909
57	1.291	1.378	1.464	**1.550**	**1.636**	**1.722**	**1.808**	**1.894**	**1.980**	**2.066**	**2.152**	**2.239**	**2.325**	**2.411**	2.497	2.583	2.669	2.755	2.841	2.927	3.013
58	1.337	1.426	1.515	**1.605**	**1.694**	**1.783**	**1.872**	**1.961**	**2.050**	**2.140**	**2.229**	**2.318**	**2.407**	**2.496**	2.585	2.674	2.764	2.853	2.942	3.031	3.120
59	1.384	1.476	1.568	**1.660**	**1.753**	**1.845**	**1.937**	**2.029**	**2.122**	**2.214**	**2.306**	**2.398**	**2.491**	**2.583**	2.675	2.767	2.860	2.952	3.044	3.136	3.229
60	1.431	1.526	1.622	**1.717**	**1.813**	**1.908**	**2.003**	**2.099**	**2.194**	**2.290**	**2.385**	**2.480**	**2.576**	**2.671**	2.767	2.862	2.957	3.053	3.148	3.244	3.339
61	1.479	1.578	1.676	**1.775**	**1.874**	**1.972**	**2.071**	**2.169**	**2.268**	**2.367**	**2.465**	**2.564**	**2.662**	**2.761**	2.860	2.958	3.057	3.155	3.254	3.353	3.451
62	1.528	1.630	1.732	**1.834**	**1.935**	**2.037**	**2.139**	**2.241**	**2.343**	**2.445**	**2.547**	**2.649**	**2.750**	**2.852**	2.954	3.056	3.158	3.260	3.362	3.463	3.565
63	1.578	1.683	1.788	**1.893**	**1.998**	**2.104**	**2.209**	**2.314**	**2.419**	**2.524**	**2.629**	**2.735**	**2.840**	**2.945**	3.050	3.155	3.261	3.366	3.471	3.576	3.681
64	1.628	1.737	1.845	**1.954**	**2.062**	**2.171**	**2.279**	**2.388**	**2.497**	**2.605**	**2.714**	**2.822**	**2.931**	**3.039**	3.148	3.256	3.365	3.473	3.582	3.690	3.799
65	1.679	1.791	1.903	**2.015**	**2.127**	**2.239**	**2.351**	**2.463**	**2.575**	**2.687**	**2.799**	**2.911**	**3.023**	**3.135**	3.247	3.359	3.471	3.583	3.695	3.807	3.919
66	1.732	1.847	1.962	2.078	2.193	2.309	2.424	2.540	2.655	2.770	**2.886**	**3.001**	**3.117**	**3.232**	3.348	3.463	3.578	3.694	3.809	3.925	4.040
67	1.784	1.903	2.022	2.141	2.260	2.379	2.498	2.617	2.736	2.855	**2.974**	**3.093**	**3.212**	**3.331**	3.450	3.569	3.688	3.807	3.926	4.045	4.164
68	1.838	1.961	2.083	2.206	2.328	2.451	2.573	2.696	2.818	2.941	**3.063**	**3.186**	**3.308**	**3.431**	3.554	3.676	3.799	3.921	4.044	4.166	4.289
69	1.892	2.019	2.145	2.271	2.397	2.523	2.649	2.776	2.902	3.028	**3.154**	**3.280**	**3.406**	**3.533**	3.659	3.785	3.911	4.037	4.163	4.290	4.416
70	1.948	2.078	2.207	2.337	2.467	2.597	2.727	2.857	2.987	3.116	**3.246**	**3.376**	**3.506**	**3.636**	3.766	3.896	4.025	4.155	4.285	4.415	4.545

(The values which are bold are within the range of observed data)

Table 26 Biomass table for *Magnolia champaca* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	27.42	29.91	32.40	34.89	37.39	39.88	42.37	44.86	47.36	49.85	52.34	54.83	57.33	59.82	62.31
11	33.17	36.19	39.21	42.22	45.24	48.25	51.27	54.28	57.30	60.32	63.33	66.35	69.36	72.38	75.40
12	39.48	43.07	46.66	50.25	53.84	57.42	61.01	64.60	68.19	71.78	75.37	78.96	82.55	86.14	89.73
13	46.33	50.55	54.76	58.97	63.18	67.39	71.61	75.82	80.03	84.24	88.46	92.67	96.88	101.09	105.30
14	53.74	58.62	63.51	68.39	73.28	78.16	83.05	87.93	92.82	97.70	102.59	107.47	112.36	117.24	122.13
15	61.69	67.29	72.90	78.51	84.12	89.73	95.33	100.94	106.55	112.16	117.77	123.37	128.98	134.59	140.20
16	70.19	76.57	82.95	89.33	95.71	102.09	108.47	114.85	121.23	127.61	133.99	140.37	146.75	153.13	159.51
17	79.23	86.44	93.64	100.84	108.05	115.25	122.45	129.65	136.86	144.06	151.26	158.47	165.67	172.87	180.08
18	88.83	96.90	104.98	113.06	121.13	129.21	137.28	145.36	153.43	161.51	169.58	177.66	185.73	193.81	201.88
19	98.97	107.97	116.97	125.97	134.96	143.96	152.96	161.96	170.95	179.95	188.95	197.95	206.94	215.94	224.94
20	109.67	119.64	129.60	139.57	149.54	159.51	169.48	179.45	189.42	199.39	209.36	219.33	229.30	239.27	249.24
21	120.91	131.90	142.89	153.88	164.87	175.86	186.86	197.85	208.84	219.83	230.82	241.81	252.80	263.80	274.79
22	132.70	144.76	156.82	168.89	180.95	193.01	205.07	217.14	229.20	241.26	253.33	265.39	277.45	289.52	301.58
23	145.03	158.22	171.40	184.59	197.77	210.96	224.14	237.33	250.51	263.70	276.88	290.07	303.25	316.44	329.62
24	157.92	172.27	186.63	200.99	215.34	229.70	244.06	258.41	272.77	287.12	301.48	315.84	330.19	344.55	358.91
25	171.35	186.93	202.51	218.09	233.66	249.24	264.82	280.40	295.97	311.55	327.13	342.71	358.28	373.86	389.44
26	185.33	202.18	219.03	235.88	252.73	269.58	286.43	303.28	320.12	336.97	353.82	370.67	387.52	404.37	421.22
27	199.87	218.04	236.20	254.37	272.54	290.71	308.88	327.05	345.22	363.39	381.56	399.73	417.90	436.07	454.24
28	214.94	234.48	254.03	273.57	293.11	312.65	332.19	351.73	371.27	390.81	410.35	429.89	449.43	468.97	488.51
29	230.57	251.53	272.49	293.46	314.42	335.38	356.34	377.30	398.26	419.22	440.18	461.14	482.10	503.07	524.03
30	246.75	269.18	291.61	314.04	336.47	358.91	381.34	403.77	426.20	448.63	471.06	493.50	515.93	538.36	560.79

Table 27 Biomass table for *Magnolia champaca* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	262.70	280.21	297.73	315.24	332.75	350.27	367.78	385.29	402.81	420.32	437.83	455.34	472.86	490.37	507.88	525.40
32	279.92	298.58	317.24	335.90	354.57	373.23	391.89	410.55	429.21	447.87	466.53	485.20	503.86	522.52	541.18	559.84
33	297.69	317.53	337.38	357.23	377.07	396.92	416.76	436.61	456.46	476.30	496.15	515.99	535.84	555.69	575.53	595.38
34	316.00	337.07	358.14	379.20	400.27	421.34	442.41	463.47	484.54	505.61	526.67	547.74	568.81	589.87	610.94	632.01
35	334.87	357.19	379.51	401.84	424.16	446.49	468.81	491.14	513.46	535.79	558.11	580.43	602.76	625.08	647.41	669.73
36	354.27	377.89	401.51	425.13	448.75	472.37	495.98	519.60	543.22	566.84	590.46	614.08	637.69	661.31	684.93	708.55
37	374.23	399.18	424.13	449.08	474.02	498.97	523.92	548.87	573.82	598.77	623.72	648.67	673.61	698.56	723.51	748.46
38	394.73	421.05	447.36	473.68	499.99	526.31	552.62	578.94	605.26	631.57	657.89	684.20	710.52	736.83	763.15	789.46
39	415.78	443.50	471.22	498.94	526.66	554.37	582.09	609.81	637.53	665.25	692.97	720.69	748.41	776.12	803.84	831.56
40	437.38	466.53	495.69	524.85	554.01	583.17	612.33	641.48	670.64	699.80	728.96	758.12	787.28	816.44	845.59	874.75
41	459.52	490.15	520.79	551.42	582.06	612.69	643.33	673.96	704.59	735.23	765.86	796.50	827.13	857.77	888.40	919.04
42	482.21	514.35	546.50	578.65	610.80	642.94	675.09	707.24	739.38	771.53	803.68	835.83	867.97	900.12	932.27	964.41
43	505.44	539.14	572.83	606.53	640.23	673.92	707.62	741.32	775.01	808.71	842.40	876.10	909.80	943.49	977.19	1010.89
44	529.22	564.51	599.79	635.07	670.35	705.63	740.91	776.20	811.48	846.76	882.04	917.32	952.60	987.89	1023.17	1058.45
45	553.55	590.46	627.36	664.26	701.17	738.07	774.98	811.88	848.78	885.69	922.59	959.49	996.40	1033.30	1070.20	1107.11
46	578.43	616.99	655.55	694.12	732.68	771.24	809.80	848.36	886.93	925.49	964.05	1002.61	1041.17	1079.74	1118.30	1156.86
47	603.85	644.11	684.37	724.62	764.88	805.14	845.39	885.65	925.91	966.16	1006.42	1046.68	1086.93	1127.19	1167.45	1207.70
48	629.82	671.81	713.80	755.79	797.77	839.76	881.75	923.74	965.73	1007.71	1049.70	1091.69	1133.68	1175.67	1217.65	1259.64
49	656.34	700.09	743.85	787.60	831.36	875.12	918.87	962.63	1006.38	1050.14	1093.90	1137.65	1181.41	1225.16	1268.92	1312.67
50	683.40	728.96	774.52	820.08	865.64	911.20	956.76	1002.32	1047.88	1093.44	1139.00	1184.56	1230.12	1275.68	1321.24	1366.80

Table 28 Biomass table for *Magnolia champaca* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	692.71	738.89	785.07	831.25	877.43	923.62	969.80	1015.98	1062.16	1108.34	1154.52	1200.70	1246.88	1293.06	1339.24	1385.42	1431.60	1477.78	1523.96	1570.15	1616.33
52	720.14	768.15	816.16	864.17	912.18	960.19	1008.20	1056.21	1104.22	1152.23	1200.24	1248.25	1296.26	1344.27	1392.28	1440.29	1488.30	1536.30	1584.31	1632.32	1680.33
53	748.11	797.98	847.85	897.73	947.60	997.48	1047.35	1097.22	1147.10	1196.97	1246.84	1296.72	1346.59	1396.47	1446.34	1496.21	1546.09	1595.96	1645.84	1695.71	1745.58
54	776.60	828.38	880.15	931.92	983.70	1035.47	1087.25	1139.02	1190.79	1242.57	1294.34	1346.11	1397.89	1449.66	1501.43	1553.21	1604.98	1656.75	1708.53	1760.30	1812.08
55	805.63	859.34	913.05	966.76	1020.47	1074.18	1127.89	1181.60	1235.30	1289.01	1342.72	1396.43	1450.14	1503.85	1557.56	1611.27	1664.98	1718.68	1772.39	1826.10	1879.81
56	835.20	890.87	946.55	1002.23	1057.91	1113.59	1169.27	1224.95	1280.63	1336.31	1391.99	1447.67	1503.35	1559.03	1614.71	1670.39	1726.07	1781.75	1837.43	1893.11	1948.79
57	865.29	922.98	980.66	1038.35	1096.03	1153.72	1211.41	1269.09	1326.78	1384.46	1442.15	1499.84	1557.52	1615.21	1672.89	1730.58	1788.27	1845.95	1903.64	1961.32	2019.01
58	895.92	955.65	1015.37	1075.10	1134.83	1194.56	1254.28	1314.01	1373.74	1433.47	1493.20	1552.92	1612.65	1672.38	1732.11	1791.83	1851.56	1911.29	1971.02	2030.75	2090.47
59	927.08	988.88	1050.69	1112.49	1174.30	1236.10	1297.91	1359.71	1421.52	1483.32	1545.13	1606.93	1668.74	1730.54	1792.35	1854.15	1915.96	1977.76	2039.57	2101.38	2163.18
60	958.77	1022.69	1086.61	1150.52	1214.44	1278.36	1342.28	1406.20	1470.11	1534.03	1597.95	1661.87	1725.79	1789.70	1853.62	1917.54	1981.46	2045.38	2109.29	2173.21	2237.13
61	991.00	1057.06	1123.13	1189.19	1255.26	1321.33	1387.39	1453.46	1519.53	1585.59	1651.66	1717.73	1783.79	1849.86	1915.92	1981.99	2048.06	2114.12	2180.19	2246.26	2312.32
62	1023.75	1092.00	1160.25	1228.50	1296.75	1365.00	1433.25	1501.50	1569.76	1638.01	1706.26	1774.51	1842.76	1911.01	1979.26	2047.51	2115.76	2184.01	2252.26	2320.51	2388.76
63	1057.04	1127.51	1197.98	1268.45	1338.92	1409.39	1479.86	1550.33	1620.80	1691.27	1761.74	1832.21	1902.68	1973.15	2043.62	2114.09	2184.56	2255.03	2325.50	2395.97	2466.44
64	1090.87	1163.59	1236.32	1309.04	1381.77	1454.49	1527.21	1599.94	1672.66	1745.39	1818.11	1890.84	1963.56	2036.29	2109.01	2181.73	2254.46	2327.18	2399.91	2472.63	2545.36
0.65	1125.22	1200.24	1275.25	1350.27	1425.28	1500.30	1575.31	1650.33	1725.34	1800.36	1875.37	1950.39	2025.40	2100.42	2175.43	2250.45	2325.46	2400.48	2475.49	2550.51	2625.52
66	1160.11	1237.45	1314.79	1392.13	1469.47	1546.82	1624.16	1701.50	1778.84	1856.18	1933.52	2010.86	2088.20	2165.54	2242.88	2320.22	2397.56	2474.90	2552.25	2629.59	2706.93
67	1195.53	1275.24	1354.94	1434.64	1514.34	1594.04	1673.75	1753.45	1833.15	1912.85	1992.55	2072.26	2151.96	2231.66	2311.36	2391.07	2470.77	2550.47	2630.17	2709.87	2789.58
68	1231.49	1313.59	1395.69	1477.78	1559.88	1641.98	1724.08	1806.18	1888.28	1970.38	2052.48	2134.58	2216.68	2298.78	2380.87	2462.97	2545.07	2627.17	2709.27	2791.37	2873.47
69	1267.97	1352.50	1437.04	1521.57	1606.10	1690.63	1775.16	1859.69	1944.23	2028.76	2113.29	2197.82	2282.35	2366.88	2451.42	2535.95	2620.48	2705.01	2789.54	2874.07	2958.60
70	1304.99	1391.99	1478.99	1565.99	1652.99	1739.99	1826.99	1913.99	2000.99	2087.99	2174.99	2261.99	2348.99	2435.99	2522.99	2609.99	2696.98	2783.98	2870.98	2957.98	3044.98

Table 29 Carbon table for *Magnolia champaca* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	13.71	14.95	16.20	17.45	18.69	19.94	21.19	22.43	23.68	24.92	26.17	27.42	28.66	29.91	31.16
11	16.59	18.09	19.60	21.11	22.62	24.13	25.63	27.14	28.65	30.16	31.67	33.17	34.68	36.19	37.70
12	19.74	21.53	23.33	25.12	26.92	28.71	30.51	32.30	34.10	35.89	37.69	39.48	41.27	43.07	44.86
13	23.17	25.27	27.38	29.49	31.59	33.70	35.80	37.91	40.02	42.12	44.23	46.33	48.44	50.55	52.65
14	26.87	29.31	31.75	34.20	36.64	39.08	41.52	43.97	46.41	48.85	51.29	53.74	56.18	58.62	61.06
15	30.84	33.65	36.45	39.26	42.06	44.86	47.67	50.47	53.28	56.08	58.88	61.69	64.49	67.29	70.10
16	35.09	38.28	41.47	44.66	47.85	51.04	54.23	57.42	60.62	63.81	67.00	70.19	73.38	76.57	79.76
17	39.62	43.22	46.82	50.42	54.02	57.62	61.23	64.83	68.43	72.03	75.63	79.23	82.83	86.44	90.04
18	44.41	48.45	52.49	56.53	60.57	64.60	68.64	72.68	76.72	80.75	84.79	88.83	92.87	96.90	100.94
19	49.49	53.99	58.48	62.98	67.48	71.98	76.48	80.98	85.48	89.98	94.47	98.97	103.47	107.97	112.47
20	54.83	59.82	64.80	69.79	74.77	79.76	84.74	89.73	94.71	99.70	104.68	109.67	114.65	119.64	124.62
21	60.45	65.95	71.44	76.94	82.44	87.93	93.43	98.92	104.42	109.91	115.41	120.91	126.40	131.90	137.39
22	66.35	72.38	78.41	84.44	90.47	96.51	102.54	108.57	114.60	120.63	126.66	132.70	138.73	144.76	150.79
23	72.52	79.11	85.70	92.29	98.89	105.48	112.07	118.66	125.26	131.85	138.44	145.03	151.63	158.22	164.81
24	78.96	86.14	93.32	100.49	107.67	114.85	122.03	129.21	136.38	143.56	150.74	157.92	165.10	172.27	179.45
25	85.68	93.47	101.25	109.04	116.83	124.62	132.41	140.20	147.99	155.78	163.56	171.35	179.14	186.93	194.72
26	92.67	101.09	109.52	117.94	126.36	134.79	143.21	151.64	160.06	168.49	176.91	185.33	193.76	202.18	210.61
27	99.93	109.02	118.10	127.19	136.27	145.36	154.44	163.53	172.61	181.70	190.78	199.87	208.95	218.04	227.12
28	107.47	117.24	127.01	136.78	146.55	156.32	166.09	175.86	185.63	195.40	205.17	214.94	224.71	234.48	244.26
29	115.29	125.77	136.25	146.73	157.21	167.69	178.17	188.65	199.13	209.61	220.09	230.57	241.05	251.53	262.01
30	123.37	134.59	145.81	157.02	168.24	179.45	190.67	201.88	213.10	224.32	235.53	246.75	257.96	269.18	280.40

Table 30 Carbon table for *Magnolia champaca* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	131.35	140.11	148.86	157.62	166.38	175.13	183.89	192.65	201.40	210.16	218.92	227.67	236.43	245.19	253.94	262.70
32	139.96	149.29	158.62	167.95	177.28	186.61	195.94	205.28	214.61	223.94	233.27	242.60	251.93	261.26	270.59	279.92
33	148.84	158.77	168.69	178.61	188.54	198.46	208.38	218.31	228.23	238.15	248.07	258.00	267.92	277.84	287.77	297.69
34	158.00	168.54	179.07	189.60	200.14	210.67	221.20	231.74	242.27	252.80	263.34	273.87	284.40	294.94	305.47	316.00
35	167.43	178.60	189.76	200.92	212.08	223.24	234.41	245.57	256.73	267.89	279.06	290.22	301.38	312.54	323.70	334.87
36	177.14	188.95	200.76	212.56	224.37	236.18	247.99	259.80	271.61	283.42	295.23	307.04	318.85	330.66	342.47	354.27
37	187.11	199.59	212.06	224.54	237.01	249.49	261.96	274.44	286.91	299.38	311.86	324.33	336.81	349.28	361.76	374.23
38	197.37	210.52	223.68	236.84	250.00	263.15	276.31	289.47	302.63	315.79	328.94	342.10	355.26	368.42	381.57	394.73
39	207.89	221.75	235.61	249.47	263.33	277.19	291.05	304.91	318.77	332.62	346.48	360.34	374.20	388.06	401.92	415.78
40	218.69	233.27	247.85	262.43	277.00	291.58	306.16	320.74	335.32	349.90	364.48	379.06	393.64	408.22	422.80	437.38
41	229.76	245.08	260.39	275.71	291.03	306.35	321.66	336.98	352.30	367.61	382.93	398.25	413.57	428.88	444.20	459.52
42	241.10	257.18	273.25	289.32	305.40	321.47	337.54	353.62	369.69	385.77	401.84	417.91	433.99	450.06	466.13	482.21
43	252.72	269.57	286.42	303.27	320.11	336.96	353.81	370.66	387.51	404.35	421.20	438.05	454.90	471.75	488.59	505.44
44	264.61	282.25	299.89	317.53	335.18	352.82	370.46	388.10	405.74	423.38	441.02	458.66	476.30	493.94	511.58	529.22
45	276.78	295.23	313.68	332.13	350.58	369.04	387.49	405.94	424.39	442.84	461.30	479.75	498.20	516.65	535.10	553.55
46	289.21	308.50	327.78	347.06	366.34	385.62	404.90	424.18	443.46	462.74	482.02	501.31	520.59	539.87	559.15	578.43
47	301.93	322.05	342.18	362.31	382.44	402.57	422.70	442.82	462.95	483.08	503.21	523.34	543.47	563.60	583.72	603.85
48	314.91	335.90	356.90	377.89	398.89	419.88	440.88	461.87	482.86	503.86	524.85	545.85	566.84	587.83	608.83	629.82
49	328.17	350.05	371.92	393.80	415.68	437.56	459.44	481.31	503.19	525.07	546.95	568.83	590.70	612.58	634.46	656.34
50	341.70	364.48	387.26	410.04	432.82	455.60	478.38	501.16	523.94	546.72	569.50	592.28	615.06	637.84	660.62	683.40

Table 31 Carbon table for *Magnolia champaca* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	346.36	369.45	392.54	415.63	438.72	461.81	484.90	507.99	531.08	554.17	577.26	600.35	623.44	646.53	669.62	692.71	715.80	738.89	761.98	785.07	808.16
52	360.07	384.08	408.08	432.09	456.09	480.10	504.10	528.10	552.11	576.11	600.12	624.12	648.13	672.13	696.14	720.14	744.15	768.15	792.16	816.16	840.17
53	374.05	398.99	423.93	448.86	473.80	498.74	523.67	548.61	573.55	598.49	623.42	648.36	673.30	698.23	723.17	748.11	773.04	797.98	822.92	847.85	872.79
54	388.30	414.19	440.08	465.96	491.85	517.74	543.62	569.51	595.40	621.28	647.17	673.06	698.94	724.83	750.72	776.60	802.49	828.38	854.26	880.15	906.04
55	402.82	429.67	456.53	483.38	510.23	537.09	563.94	590.80	617.65	644.51	671.36	698.22	725.07	751.92	778.78	805.63	832.49	859.34	886.20	913.05	939.91
56	417.60	445.44	473.28	501.12	528.96	556.80	584.64	612.48	640.32	668.16	696.00	723.84	751.68	779.52	807.36	835.20	863.04	890.87	918.71	946.55	974.39
57	432.64	461.49	490.33	519.17	548.02	576.86	605.70	634.55	663.39	692.23	721.07	749.92	778.76	807.60	836.45	865.29	894.13	922.98	951.82	980.66	1009.50
58	447.96	477.82	507.69	537.55	567.41	597.28	627.14	657.01	686.87	716.73	746.60	776.46	806.33	836.19	866.05	895.92	925.78	955.65	985.51	1015.37	1045.24
59	463.54	494.44	525.34	556.25	587.15	618.05	648.95	679.86	710.76	741.66	772.56	803.47	834.37	865.27	896.17	927.08	957.98	988.88	1019.79	1050.69	1081.59
60	479.39	511.34	543.30	575.26	607.22	639.18	671.14	703.10	735.06	767.02	798.98	830.93	862.89	894.85	926.81	958.77	990.73	1022.69	1054.65	1086.61	1118.57
61	495.50	528.53	561.56	594.60	627.63	660.66	693.70	726.73	759.76	792.80	825.83	858.86	891.90	924.93	957.96	991.00	1024.03	1057.06	1090.09	1123.13	1156.16
62	511.88	546.00	580.13	614.25	648.38	682.50	716.63	750.75	784.88	819.00	853.13	887.25	921.38	955.50	989.63	1023.75	1057.88	1092.00	1126.13	1160.25	1194.38
63	528.52	563.76	598.99	634.23	669.46	704.70	739.93	775.17	810.40	845.64	880.87	916.10	951.34	986.57	1021.81	1057.04	1092.28	1127.51	1162.75	1197.98	1233.22
64	545.43	581.80	618.16	654.52	690.88	727.24	763.61	799.97	836.33	872.69	909.06	945.42	981.78	1018.14	1054.50	1090.87	1127.23	1163.59	1199.95	1236.32	1272.68
0.65	562.61	600.12	637.63	675.13	712.64	750.15	787.66	825.16	862.67	900.18	937.69	975.19	1012.70	1050.21	1087.72	1125.22	1162.73	1200.24	1237.75	1275.25	1312.76
66	580.06	618.73	657.40	696.07	734.74	773.41	812.08	850.75	889.42	928.09	966.76	1005.43	1044.10	1082.77	1121.44	1160.11	1198.78	1237.45	1276.12	1314.79	1353.46
67	597.77	637.62	677.47	717.32	757.17	797.02	836.87	876.72	916.58	956.43	996.28	1036.13	1075.98	1115.83	1155.68	1195.53	1235.38	1275.24	1315.09	1354.94	1394.79
68	615.74	656.79	697.84	738.89	779.94	820.99	862.04	903.09	944.14	985.19	1026.24	1067.29	1108.34	1149.39	1190.44	1231.49	1272.54	1313.59	1354.64	1395.69	1436.73
69	633.99	676.25	718.52	760.78	803.05	845.32	887.58	929.85	972.11	1014.38	1056.64	1098.91	1141.18	1183.44	1225.71	1267.97	1310.24	1352.50	1394.77	1437.04	1479.30
70	652.50	696.00	739.50	783.00	826.50	870.00	913.49	956.99	1000.49	1043.99	1087.49	1130.99	1174.49	1217.99	1261.49	1304.99	1348.49	1391.99	1435.49	1478.99	1522.49

Table 32 Volume, biomass and carbon table for *Magnolia champca* (DBH 10 -50 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
10	0.061	41.00	20.50	**31**	0.550	368.74	184.37
11	0.074	49.61	24.81	**32**	0.586	392.92	196.46
12	0.088	59.05	29.52	**33**	0.624	417.86	208.93
13	0.103	69.30	34.65	**34**	0.662	443.57	221.78
14	0.120	80.37	40.18	**35**	0.702	470.04	235.02
15	0.138	92.26	46.13	**36**	0.742	497.29	248.64
16	0.157	104.97	52.49	**37**	0.784	525.30	262.65
17	0.177	118.50	59.25	**38**	0.827	554.08	277.04
18	0.198	132.85	66.43	**39**	0.871	583.62	291.81
19	0.221	148.02	74.01	**40**	0.916	613.93	306.97
20	0.245	164.02	82.01	**41**	0.963	645.01	322.51
21	0.270	180.83	90.41	**42**	1.010	676.86	338.43
22	0.296	198.46	99.23	**43**	1.059	709.48	354.74
23	0.324	216.91	108.46	**44**	1.109	742.86	371.43
24	0.353	236.18	118.09	**45**	1.160	777.01	388.51
25	0.383	256.28	128.14	**46**	1.212	811.93	405.96
26	0.414	277.19	138.59	**47**	1.265	847.61	423.81
27	0.446	298.92	149.46	**48**	1.320	884.07	442.03
28	0.480	321.47	160.74	**49**	1.375	921.29	460.64
29	0.515	344.84	172.42	**50**	1.432	959.27	479.64
30	0.551	369.04	184.52				

Table 33 Volume, biomass and carbon table for *Magnolia champca* (DBH 51-100 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
51	1.700	1138.83	569.42	**76**	3.775	2528.99	1264.50
52	1.767	1183.93	591.97	**77**	3.875	2595.98	1297.99
53	1.836	1229.91	614.95	**78**	3.976	2663.85	1331.92
54	1.906	1276.76	638.38	**79**	4.078	2732.59	1366.30
55	1.977	1324.48	662.24	**80**	4.182	2802.21	1401.10
56	2.049	1373.08	686.54	**81**	4.288	2872.70	1436.35
57	2.123	1422.56	711.28	**82**	4.394	2944.07	1472.03
58	2.198	1472.91	736.46	**83**	4.502	3016.31	1508.16
69	2.275	1524.14	762.07	**84**	4.611	3089.43	1544.72
60	2.353	1576.24	788.12	**85**	4.722	3163.43	1581.72
61	2.432	1629.22	814.61	**86**	4.833	3238.30	1619.15
62	2.512	1683.08	841.54	**87**	4.946	3314.05	1657.02
63	2.594	1737.81	868.90	**88**	5.061	3390.67	1695.34
64	2.677	1793.41	896.71	**89**	5.176	3468.17	1734.09
65	2.761	1849.90	924.95	**90**	5.293	3546.54	1773.27
66	2.847	1907.25	953.63	**91**	5.412	3625.79	1812.90
67	2.934	1965.49	982.74	**92**	5.531	3705.92	1852.96
68	3.022	2024.60	1012.30	**93**	5.652	3786.92	1893.46
69	3.111	2084.58	1042.29	**94**	5.774	3868.80	1934.40
70	3.202	2145.44	1072.72	**95**	5.898	3951.55	1975.78
71	3.294	2207.18	1103.59	**96**	6.023	4035.18	2017.59
72	3.388	2269.79	1134.89	**97**	6.149	4119.68	2059.84
73	3.483	2333.28	1166.64	**98**	6.276	4205.06	2102.53
74	3.579	2397.64	1198.82	**99**	6.405	4291.32	2145.66
75	3.676	2462.88	1231.44	**100**	6.535	4378.45	2189.23

Table 34 Volume table for *Toona ciliata* (10-30 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)														
	11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
10	0.033	0.036	0.039	0.042	0.045	0.048	0.051	0.054	0.057	0.060	0.063	0.066	0.069	0.072	0.075
11	**0.040**	0.043	0.047	0.050	0.054	0.058	0.061	0.065	0.069	0.072	0.076	0.079	0.083	0.087	0.090
12	**0.047**	0.051	0.056	0.060	0.064	0.069	0.073	0.077	0.082	0.086	0.090	0.094	0.099	0.103	0.107
13	**0.055**	**0.060**	0.065	0.071	0.076	0.081	0.086	0.091	0.096	0.101	0.106	0.111	0.116	0.121	0.126
14	**0.064**	**0.070**	0.076	0.082	0.088	0.093	0.099	0.105	0.111	0.117	0.123	0.128	0.134	0.140	0.146
15	**0.074**	**0.080**	0.087	0.094	0.101	0.107	0.114	0.121	0.127	0.134	0.141	0.148	0.154	0.161	0.168
16	**0.084**	**0.092**	**0.099**	0.107	0.114	0.122	0.130	0.137	0.145	0.153	0.160	0.168	0.175	0.183	0.191
17	**0.095**	**0.103**	**0.112**	0.121	0.129	0.138	0.146	0.155	0.164	0.172	0.181	0.189	0.198	0.207	0.215
18	**0.106**	**0.116**	**0.126**	**0.135**	**0.145**	**0.154**	**0.164**	0.174	0.183	0.193	0.203	0.212	0.222	0.232	0.241
19	0.118	**0.129**	**0.140**	**0.151**	**0.161**	**0.172**	**0.183**	0.194	0.204	0.215	0.226	0.237	0.247	0.258	0.269
20	0.131	**0.143**	**0.155**	**0.167**	**0.179**	**0.191**	**0.203**	0.215	0.226	0.238	0.250	0.262	0.274	0.286	0.298
21	0.145	**0.158**	**0.171**	**0.184**	**0.197**	**0.210**	**0.223**	0.237	0.250	0.263	0.276	0.289	0.302	0.315	0.329
22	0.159	**0.173**	**0.188**	**0.202**	**0.216**	**0.231**	**0.245**	0.260	0.274	0.288	0.303	0.317	0.332	0.346	0.361
23	0.173	**0.189**	**0.205**	**0.221**	**0.236**	**0.252**	**0.268**	**0.284**	**0.300**	**0.315**	0.331	0.347	0.363	0.378	0.394
24	0.189	**0.206**	**0.223**	**0.240**	**0.257**	**0.275**	**0.292**	**0.309**	**0.326**	**0.343**	0.360	0.378	0.395	0.412	0.429
25	0.205	**0.224**	**0.242**	**0.261**	**0.279**	**0.298**	**0.317**	**0.335**	**0.354**	**0.373**	0.391	0.410	0.428	0.447	0.466
26	0.222	**0.242**	**0.262**	**0.282**	**0.302**	**0.322**	**0.342**	**0.363**	**0.383**	**0.403**	0.423	0.443	0.463	0.483	0.504
27	0.239	0.261	0.282	0.304	0.326	0.348	**0.369**	**0.391**	**0.413**	**0.434**	0.456	0.478	0.500	0.521	0.543
28	0.257	0.280	0.304	0.327	0.350	0.374	**0.397**	**0.421**	**0.444**	**0.467**	0.491	0.514	0.537	0.561	0.584
29	0.276	0.301	0.326	0.351	0.376	0.401	**0.426**	**0.451**	**0.476**	**0.501**	**0.526**	**0.551**	**0.576**	**0.601**	0.627
30	0.295	0.322	0.349	0.375	0.402	0.429	**0.456**	**0.483**	**0.510**	**0.536**	**0.563**	**0.590**	**0.617**	**0.644**	0.671

(The values which are bold are within the range of observed data)

Table 35 Volume table for *Toona ciliata* (31-50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	**0.268**	**0.286**	0.304	0.322	0.340	0.357	0.375	0.393	0.411	0.429	0.447	0.465	0.483	0.500	0.518	0.536
32	**0.286**	**0.305**	0.324	0.343	0.362	0.381	0.400	0.419	0.438	0.457	0.476	0.495	0.514	0.533	0.552	0.571
33	**0.304**	**0.324**	**0.344**	**0.365**	**0.385**	**0.405**	**0.425**	**0.446**	**0.466**	**0.486**	0.506	0.527	0.547	0.567	0.587	0.608
34	0.323	**0.344**	**0.366**	**0.387**	**0.409**	**0.430**	**0.452**	**0.473**	**0.495**	**0.516**	0.538	0.559	0.581	0.602	0.624	0.645
35	0.342	**0.365**	**0.387**	**0.410**	**0.433**	**0.456**	**0.478**	**0.501**	**0.524**	**0.547**	0.570	0.592	0.615	0.638	0.661	0.684
36	0.362	**0.386**	**0.410**	**0.434**	**0.458**	**0.482**	**0.506**	**0.530**	**0.554**	**0.579**	0.603	0.627	0.651	0.675	0.699	0.723
37	0.382	**0.407**	**0.433**	**0.458**	**0.484**	**0.509**	**0.535**	**0.560**	**0.586**	**0.611**	0.637	0.662	0.688	0.713	0.738	0.764
38	0.403	**0.430**	**0.457**	**0.483**	**0.510**	**0.537**	**0.564**	**0.591**	**0.618**	**0.645**	**0.671**	0.698	0.725	0.752	0.779	0.806
39	0.424	**0.453**	**0.481**	**0.509**	**0.538**	**0.566**	**0.594**	**0.622**	**0.651**	**0.679**	**0.707**	0.736	0.764	0.792	0.820	0.849
40	0.446	**0.476**	**0.506**	**0.536**	**0.565**	**0.595**	**0.625**	**0.655**	**0.684**	**0.714**	**0.744**	0.774	0.804	0.833	0.863	0.893
41	0.469	**0.500**	**0.532**	**0.563**	**0.594**	**0.625**	**0.657**	**0.688**	**0.719**	**0.750**	**0.782**	**0.813**	**0.844**	0.875	0.907	0.938
42	0.492	**0.525**	**0.558**	**0.591**	**0.623**	**0.656**	**0.689**	**0.722**	**0.755**	**0.787**	**0.820**	**0.853**	**0.886**	0.919	0.952	0.984
43	0.516	**0.550**	**0.585**	**0.619**	**0.653**	**0.688**	**0.722**	**0.757**	**0.791**	**0.825**	**0.860**	**0.894**	**0.929**	0.963	0.997	1.032
44	0.540	**0.576**	**0.612**	**0.648**	**0.684**	**0.720**	**0.756**	**0.792**	**0.828**	**0.864**	**0.900**	**0.936**	**0.972**	1.008	1.044	1.080
45	0.565	**0.603**	**0.640**	**0.678**	**0.716**	**0.753**	**0.791**	**0.829**	**0.866**	**0.904**	**0.942**	**0.979**	**1.017**	1.055	1.092	1.130
46	0.590	**0.630**	**0.669**	**0.708**	**0.748**	**0.787**	**0.827**	**0.866**	**0.905**	**0.945**	**0.984**	**1.023**	**1.063**	1.102	1.141	1.181
47	0.616	**0.657**	**0.698**	**0.740**	**0.781**	**0.822**	**0.863**	**0.904**	**0.945**	**0.986**	**1.027**	**1.068**	**1.109**	1.150	1.192	1.233
48	0.643	**0.686**	**0.729**	**0.771**	**0.814**	**0.857**	**0.900**	**0.943**	**0.986**	**1.029**	**1.071**	**1.114**	**1.157**	1.200	1.243	1.286
49	0.670	0.715	**0.759**	**0.804**	**0.849**	**0.893**	**0.938**	**0.982**	**1.027**	**1.072**	**1.116**	**1.161**	**1.206**	1.250	1.295	1.340
50	0.698	0.744	**0.791**	**0.837**	**0.884**	**0.930**	**0.977**	**1.023**	**1.070**	**1.116**	**1.163**	**1.209**	**1.256**	1.302	1.349	1.395

(The values which are bold are within the range of observed data)

Table 36 Volume table for *Toona ciliata* (>50 cm diameter class) in m^3

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	0.987	1.053	1.119	1.184	1.250	1.316	1.382	1.448	**1.514**	**1.579**	**1.645**	1.711	**1.777**	1.843	1.908	1.974	2.040	2.106	2.172	2.237	2.303
52	1.026	1.095	1.163	1.231	1.300	1.368	**1.437**	**1.505**	**1.573**	**1.642**	**1.710**	**1.779**	**1.847**	1.916	1.984	2.052	2.121	2.189	2.258	2.326	2.394
53	1.066	1.137	1.208	1.279	1.350	1.421	**1.492**	**1.563**	**1.635**	**1.706**	**1.777**	**1.848**	**1.919**	1.990	2.061	2.132	2.203	2.274	2.345	2.416	2.487
54	1.107	**1.180**	**1.254**	**1.328**	**1.402**	**1.475**	**1.549**	**1.623**	**1.697**	**1.771**	**1.844**	**1.918**	**1.992**	2.066	2.139	2.213	2.287	2.361	2.435	2.508	2.582
55	1.148	**1.225**	**1.301**	**1.378**	**1.454**	**1.531**	**1.607**	**1.684**	**1.760**	**1.837**	**1.913**	**1.990**	**2.066**	2.143	2.219	2.296	2.373	2.449	2.526	2.602	2.679
56	1.190	**1.269**	**1.349**	**1.428**	**1.507**	**1.587**	**1.666**	**1.745**	**1.825**	**1.904**	**1.984**	**2.063**	**2.142**	2.222	2.301	2.380	2.460	2.539	2.618	2.698	2.777
57	1.233	**1.315**	**1.397**	**1.480**	**1.562**	**1.644**	**1.726**	**1.808**	**1.891**	**1.973**	**2.055**	**2.137**	**2.219**	2.302	2.384	2.466	2.548	2.630	2.713	2.795	2.877
58	1.277	**1.362**	**1.447**	**1.532**	**1.617**	**1.702**	**1.787**	**1.872**	**1.958**	**2.043**	**2.128**	**2.213**	**2.298**	2.383	2.468	2.553	2.638	2.723	2.809	2.894	2.979
59	1.321	1.409	1.497	1.585	**1.673**	**1.761**	**1.849**	**1.938**	**2.026**	**2.114**	**2.202**	**2.290**	**2.378**	2.466	2.554	2.642	2.730	2.818	2.906	2.994	3.082
60	1.366	1.457	1.548	1.639	**1.731**	**1.822**	**1.913**	**2.004**	**2.095**	**2.186**	**2.277**	**2.368**	**2.459**	**2.550**	2.641	2.732	2.823	2.915	3.006	3.097	3.188
61	1.412	1.506	1.600	1.695	**1.789**	**1.883**	**1.977**	**2.071**	**2.165**	**2.259**	**2.354**	**2.448**	**2.542**	**2.636**	2.730	2.824	2.918	3.013	3.107	3.201	3.295
62	1.459	1.556	1.653	1.751	1.848	**1.945**	**2.042**	**2.140**	**2.237**	**2.334**	**2.431**	**2.529**	**2.626**	**2.723**	2.820	2.918	3.015	3.112	3.209	3.307	3.404
63	1.506	1.607	1.707	1.807	1.908	**2.008**	**2.109**	**2.209**	**2.310**	**2.410**	**2.510**	**2.611**	**2.711**	**2.812**	2.912	3.012	3.113	3.213	3.314	3.414	3.515
64	1.554	1.658	1.762	1.865	1.969	**2.073**	**2.176**	**2.280**	**2.383**	**2.487**	**2.591**	**2.694**	**2.798**	**2.902**	3.005	3.109	3.212	3.316	3.420	3.523	3.627
65	1.603	1.710	1.817	1.924	2.031	2.138	2.245	2.352	2.459	2.565	**2.672**	**2.779**	**2.886**	**2.993**	3.100	3.207	3.314	3.421	3.527	3.634	3.741
66	1.653	1.763	1.874	1.984	2.094	2.204	2.314	2.425	2.535	2.645	**2.755**	**2.865**	**2.976**	**3.086**	3.196	3.306	3.416	3.527	3.637	3.747	3.857
67	1.704	1.817	1.931	2.044	2.158	2.271	2.385	2.499	2.612	2.726	**2.839**	**2.953**	**3.066**	**3.180**	3.294	3.407	3.521	3.634	3.748	3.861	3.975
68	1.755	1.872	1.989	2.106	2.223	2.340	2.457	2.574	2.691	2.808	**2.925**	**3.042**	**3.159**	**3.276**	3.393	3.510	3.627	3.744	3.861	3.978	4.095
69	1.807	1.927	2.048	2.168	2.289	2.409	2.530	2.650	2.770	2.891	**3.011**	**3.132**	**3.252**	**3.373**	**3.493**	**3.614**	**3.734**	3.855	3.975	4.095	4.216
70	1.860	1.984	2.107	2.231	2.355	2.479	2.603	2.727	2.851	2.975	**3.099**	**3.223**	**3.347**	**3.471**	**3.595**	**3.719**	**3.843**	3.967	4.091	4.215	4.339

(The values which are bold are within the range of observed data)

Table 37 Biomass table for *Toona ciliata* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	18.36	20.03	21.69	23.36	25.03	26.70	28.37	30.04	31.71	33.38	35.04	36.71	38.38	40.05	41.72
11	22.21	24.23	26.25	28.27	30.29	32.31	34.33	36.35	38.37	40.38	42.40	44.42	46.44	48.46	50.48
12	26.43	28.84	31.24	33.64	36.05	38.45	40.85	43.26	45.66	48.06	50.46	52.87	55.27	57.67	60.08
13	31.02	33.84	36.66	39.48	42.30	45.12	47.94	50.76	53.59	56.41	59.23	62.05	64.87	67.69	70.51
14	35.98	39.25	42.52	45.79	49.06	52.33	55.60	58.88	62.15	65.42	68.69	71.96	75.23	78.50	81.77
15	41.30	45.06	48.81	52.57	56.32	60.08	63.83	67.59	71.34	75.10	78.85	82.61	86.36	90.12	93.87
16	46.99	51.27	55.54	59.81	64.08	68.35	72.63	76.90	81.17	85.44	89.71	93.99	98.26	102.53	106.80
17	53.05	57.87	62.70	67.52	72.34	77.17	81.99	86.81	91.63	96.46	101.28	106.10	110.93	115.75	120.57
18	59.48	64.88	70.29	75.70	81.10	86.51	91.92	97.32	102.73	108.14	113.55	118.95	124.36	129.77	135.17
19	66.27	72.29	78.32	84.34	90.37	96.39	102.41	108.44	114.46	120.49	126.51	132.54	138.56	144.58	150.61
20	73.43	80.10	86.78	93.45	100.13	106.80	113.48	120.15	126.83	133.50	140.18	146.85	153.53	160.20	166.88
21	80.95	88.31	95.67	103.03	110.39	117.75	125.11	132.47	139.83	147.19	154.55	161.91	169.27	176.63	183.99
22	88.85	96.92	105.00	113.08	121.15	129.23	137.31	145.39	153.46	161.54	169.62	177.69	185.77	193.85	201.92
23	97.11	105.94	114.76	123.59	132.42	141.25	150.08	158.90	167.73	176.56	185.39	194.21	203.04	211.87	220.70
24	105.74	115.35	124.96	134.57	144.18	153.80	163.41	173.02	182.63	192.25	201.86	211.47	221.08	230.69	240.31
25	114.73	125.16	135.59	146.02	156.45	166.88	177.31	187.74	198.17	208.60	219.03	229.46	239.89	250.32	260.75
26	124.09	135.37	146.65	157.94	169.22	180.50	191.78	203.06	214.34	225.62	236.90	248.18	259.47	270.75	282.03
27	133.82	145.99	158.15	170.32	182.48	194.65	206.81	218.98	231.15	243.31	255.48	267.64	279.81	291.97	304.14
28	143.92	157.00	170.08	183.17	196.25	209.33	222.42	235.50	248.58	261.67	274.75	287.83	300.92	314.00	327.08
29	154.38	168.42	182.45	196.48	210.52	224.55	238.59	252.62	266.66	280.69	294.73	308.76	322.80	336.83	350.87
30	165.21	180.23	195.25	210.27	225.29	240.31	255.33	270.35	285.36	300.38	315.40	330.42	345.44	360.46	375.48

Table 38 Biomass table for *Toona ciliata* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	150.15	160.16	170.17	180.18	190.19	200.20	210.21	220.22	230.22	240.23	250.24	260.25	270.26	280.27	290.28	300.29
32	159.99	170.66	181.32	191.99	202.65	213.32	223.99	234.65	245.32	255.98	266.65	277.32	287.98	298.65	309.31	319.98
33	170.15	181.49	192.83	204.17	215.52	226.86	238.20	249.55	260.89	272.23	283.58	294.92	306.26	317.60	328.95	340.29
34	180.61	192.65	204.70	216.74	228.78	240.82	252.86	264.90	276.94	288.98	301.02	313.06	325.10	337.15	349.19	361.23
35	191.39	204.15	216.91	229.67	242.43	255.19	267.95	280.71	293.47	306.23	318.99	331.75	344.51	357.27	370.03	382.79
36	202.49	215.99	229.49	242.98	256.48	269.98	283.48	296.98	310.48	323.98	337.48	350.98	364.48	377.98	391.47	404.97
37	213.89	228.15	242.41	256.67	270.93	285.19	299.45	313.71	327.97	342.23	356.49	370.75	385.01	399.27	413.53	427.79
38	225.61	240.65	255.69	270.73	285.77	300.81	315.85	330.90	345.94	360.98	376.02	391.06	406.10	421.14	436.18	451.22
39	237.64	253.48	269.33	285.17	301.01	316.85	332.70	348.54	364.38	380.23	396.07	411.91	427.75	443.60	459.44	475.28
40	249.98	266.65	283.32	299.98	316.65	333.31	349.98	366.64	383.31	399.97	416.64	433.31	449.97	466.64	483.30	499.97
41	262.64	280.15	297.66	315.17	332.68	350.19	367.70	385.20	402.71	420.22	437.73	455.24	472.75	490.26	507.77	525.28
42	275.61	293.98	312.36	330.73	349.10	367.48	385.85	404.22	422.60	440.97	459.35	477.72	496.09	514.47	532.84	551.21
43	288.89	308.15	327.41	346.67	365.92	385.18	404.44	423.70	442.96	462.22	481.48	500.74	520.00	539.26	558.52	577.78
44	302.48	322.65	342.81	362.98	383.14	403.31	423.47	443.64	463.80	483.97	504.13	524.30	544.47	564.63	584.80	604.96
45	316.39	337.48	358.57	379.66	400.76	421.85	442.94	464.03	485.13	506.22	527.31	548.40	569.49	590.59	611.68	632.77
46	330.60	352.64	374.68	396.72	418.76	440.81	462.85	484.89	506.93	528.97	551.01	573.05	595.09	617.13	639.17	661.21
47	345.13	368.14	391.15	414.16	437.17	460.18	483.19	506.20	529.21	552.21	575.22	598.23	621.24	644.25	667.26	690.27
48	359.98	383.98	407.97	431.97	455.97	479.97	503.97	527.97	551.96	575.96	599.96	623.96	647.96	671.96	695.96	719.95
49	375.13	400.14	425.15	450.16	475.17	500.18	525.19	550.19	575.20	600.21	625.22	650.23	675.24	700.25	725.26	750.26
50	390.60	416.64	442.68	468.72	494.76	520.80	546.84	572.88	598.92	624.96	651.00	677.04	703.08	729.12	755.16	781.20

Table 39 Biomass table for *Toona ciliata* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	552.76	589.62	626.47	663.32	700.17	737.02	773.87	810.72	847.57	884.42	921.27	958.13	994.98	1031.83	1068.68	1105.53	1142.38	1179.23	1216.08	1252.93	1289.78
52	574.65	612.96	651.27	689.58	727.90	766.21	804.52	842.83	881.14	919.45	957.76	996.07	1034.38	1072.69	1111.00	1149.31	1187.62	1225.93	1264.24	1302.55	1340.86
53	596.97	636.77	676.56	716.36	756.16	795.96	835.76	875.55	915.35	955.15	994.95	1034.75	1074.54	1114.34	1154.14	1193.94	1233.74	1273.53	1313.33	1353.13	1392.93
54	619.71	661.02	702.34	743.65	784.96	826.28	867.59	908.91	950.22	991.53	1032.85	1074.16	1115.47	1156.79	1198.10	1239.42	1280.73	1322.04	1363.36	1404.67	1445.99
55	642.87	685.73	728.59	771.45	814.31	857.16	900.02	942.88	985.74	1028.60	1071.46	1114.31	1157.17	1200.03	1242.89	1285.75	1328.60	1371.46	1414.32	1457.18	1500.04
56	666.46	710.89	755.32	799.76	844.19	888.62	933.05	977.48	1021.91	1066.34	1110.77	1155.20	1199.63	1244.06	1288.49	1332.93	1377.36	1421.79	1466.22	1510.65	1555.08
57	690.48	736.51	782.54	828.57	874.60	920.64	966.67	1012.70	1058.73	1104.76	1150.80	1196.83	1242.86	1288.89	1334.92	1380.95	1426.99	1473.02	1519.05	1565.08	1611.11
58	714.92	762.58	810.24	857.90	905.56	953.22	1000.88	1048.55	1096.21	1143.87	1191.53	1239.19	1286.85	1334.51	1382.17	1429.83	1477.50	1525.16	1572.82	1620.48	1668.14
59	739.78	789.10	838.42	887.74	937.06	986.38	1035.69	1085.01	1134.33	1183.65	1232.97	1282.29	1331.61	1380.93	1430.25	1479.56	1528.88	1578.20	1627.52	1676.84	1726.16
60	765.07	816.08	867.08	918.09	969.09	1020.10	1071.10	1122.11	1173.11	1224.12	1275.12	1326.12	1377.13	1428.13	1479.14	1530.14	1581.15	1632.15	1683.16	1734.16	1785.17
61	790.79	843.51	896.23	948.94	1001.66	1054.38	1107.10	1159.82	1212.54	1265.26	1317.98	1370.70	1423.42	1476.14	1528.85	1581.57	1634.29	1687.01	1739.73	1792.45	1845.17
62	816.93	871.39	925.85	980.31	1034.77	1089.24	1143.70	1198.16	1252.62	1307.08	1361.54	1416.01	1470.47	1524.93	1579.39	1633.85	1688.32	1742.78	1797.24	1851.70	1906.16
63	843.49	899.72	955.96	1012.19	1068.42	1124.66	1180.89	1237.12	1293.35	1349.59	1405.82	1462.05	1518.29	1574.52	1630.75	1686.98	1743.22	1799.45	1855.68	1911.91	1968.15
64	870.48	928.51	986.55	1044.58	1102.61	1160.64	1218.67	1276.71	1334.74	1392.77	1450.80	1508.84	1566.87	1624.90	1682.93	1740.96	1799.00	1857.03	1915.06	1973.09	2031.12
65	897.90	957.76	1017.62	1077.48	1137.34	1197.20	1257.06	1316.92	1376.78	1436.64	1496.50	1556.35	1616.21	1676.07	1735.93	1795.79	1855.65	1915.51	1975.37	2035.23	2095.09
66	925.74	987.45	1049.17	1110.88	1172.60	1234.32	1296.03	1357.75	1419.46	1481.18	1542.90	1604.61	1666.33	1728.04	1789.76	1851.47	1913.19	1974.91	2036.62	2098.34	2160.05
67	954.00	1017.60	1081.20	1144.80	1208.40	1272.00	1335.60	1399.20	1462.80	1526.40	1590.00	1653.60	1717.20	1780.80	1844.40	1908.00	1971.60	2035.20	2098.81	2162.41	2226.01
68	982.69	1048.21	1113.72	1179.23	1244.74	1310.26	1375.77	1441.28	1506.80	1572.31	1637.82	1703.33	1768.85	1834.36	1899.87	1965.38	2030.90	2096.41	2161.92	2227.44	2292.95
69	1011.81	1079.26	1146.72	1214.17	1281.62	1349.08	1416.53	1483.98	1551.44	1618.89	1686.35	1753.80	1821.25	1888.71	1956.16	2023.62	2091.07	2158.52	2225.98	2293.43	2360.88
70	1041.35	1110.77	1180.19	1249.62	1319.04	1388.46	1457.89	1527.31	1596.73	1666.16	1735.58	1805.00	1874.43	1943.85	2013.27	2082.70	2152.12	2221.54	2290.97	2360.39	2429.81

Table 40 Carbon table for *Toona ciliata* (10-30 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	9.18	10.01	10.85	11.68	12.52	13.35	14.18	15.02	15.85	16.69	17.52	18.36	19.19	20.03	20.86
11	11.11	12.12	13.13	14.13	15.14	16.15	17.16	18.17	19.18	20.19	21.20	22.21	23.22	24.23	25.24
12	13.22	14.42	15.62	16.82	18.02	19.22	20.43	21.63	22.83	24.03	25.23	26.43	27.64	28.84	30.04
13	15.51	16.92	18.33	19.74	21.15	22.56	23.97	25.38	26.79	28.20	29.61	31.02	32.43	33.84	35.25
14	17.99	19.63	21.26	22.90	24.53	26.17	27.80	29.44	31.07	32.71	34.34	35.98	37.61	39.25	40.89
15	20.65	22.53	24.41	26.28	28.16	30.04	31.92	33.79	35.67	37.55	39.43	41.30	43.18	45.06	46.94
16	23.50	25.63	27.77	29.90	32.04	34.18	36.31	38.45	40.59	42.72	44.86	46.99	49.13	51.27	53.40
17	26.53	28.94	31.35	33.76	36.17	38.58	40.99	43.41	45.82	48.23	50.64	53.05	55.46	57.87	60.29
18	29.74	32.44	35.14	37.85	40.55	43.26	45.96	48.66	51.37	54.07	56.77	59.48	62.18	64.88	67.59
19	33.13	36.15	39.16	42.17	45.18	48.19	51.21	54.22	57.23	60.24	63.26	66.27	69.28	72.29	75.30
20	36.71	40.05	43.39	46.73	50.06	53.40	56.74	60.08	63.41	66.75	70.09	73.43	76.76	80.10	83.44
21	40.48	44.16	47.84	51.52	55.20	58.88	62.55	66.23	69.91	73.59	77.27	80.95	84.63	88.31	91.99
22	44.42	48.46	52.50	56.54	60.58	64.62	68.65	72.69	76.73	80.77	84.81	88.85	92.89	96.92	100.96
23	48.55	52.97	57.38	61.80	66.21	70.62	75.04	79.45	83.87	88.28	92.69	97.11	101.52	105.94	110.35
24	52.87	57.67	62.48	67.29	72.09	76.90	81.70	86.51	91.32	96.12	100.93	105.74	110.54	115.35	120.15
25	57.37	62.58	67.80	73.01	78.23	83.44	88.66	93.87	99.09	104.30	109.52	114.73	119.95	125.16	130.38
26	62.05	67.69	73.33	78.97	84.61	90.25	95.89	101.53	107.17	112.81	118.45	124.09	129.73	135.37	141.01
27	66.91	72.99	79.08	85.16	91.24	97.32	103.41	109.49	115.57	121.66	127.74	133.82	139.90	145.99	152.07
28	71.96	78.50	85.04	91.58	98.13	104.67	111.21	117.75	124.29	130.83	137.38	143.92	150.46	157.00	163.54
29	77.19	84.21	91.22	98.24	105.26	112.28	119.29	126.31	133.33	140.35	147.36	154.38	161.40	168.42	175.43
30	82.61	90.12	97.62	105.13	112.64	120.15	127.66	135.17	142.68	150.19	157.70	165.21	172.72	180.23	187.74

Table 41 Carbon table for *Toona ciliata* (31-50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)															
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	75.07	80.08	85.08	90.09	95.09	100.10	105.10	110.11	115.11	120.12	125.12	130.13	135.13	140.14	145.14	150.15
32	79.99	85.33	90.66	95.99	101.33	106.66	111.99	117.33	122.66	127.99	133.32	138.66	143.99	149.32	154.66	159.99
33	85.07	90.74	96.42	102.09	107.76	113.43	119.10	124.77	130.44	136.12	141.79	147.46	153.13	158.80	164.47	170.15
34	90.31	96.33	102.35	108.37	114.39	120.41	126.43	132.45	138.47	144.49	150.51	156.53	162.55	168.57	174.59	180.61
35	95.70	102.08	108.46	114.84	121.22	127.60	133.98	140.36	146.74	153.12	159.50	165.87	172.25	178.63	185.01	191.39
36	101.24	107.99	114.74	121.49	128.24	134.99	141.74	148.49	155.24	161.99	168.74	175.49	182.24	188.99	195.74	202.49
37	106.95	114.08	121.21	128.34	135.47	142.60	149.72	156.85	163.98	171.11	178.24	185.37	192.50	199.63	206.76	213.89
38	112.81	120.33	127.85	135.37	142.89	150.41	157.93	165.45	172.97	180.49	188.01	195.53	203.05	210.57	218.09	225.61
39	118.82	126.74	134.66	142.58	150.51	158.43	166.35	174.27	182.19	190.11	198.03	205.96	213.88	221.80	229.72	237.64
40	124.99	133.32	141.66	149.99	158.32	166.66	174.99	183.32	191.65	199.99	208.32	216.65	224.99	233.32	241.65	249.98
41	131.32	140.07	148.83	157.58	166.34	175.09	183.85	192.60	201.36	210.11	218.87	227.62	236.38	245.13	253.88	262.64
42	137.80	146.99	156.18	165.36	174.55	183.74	192.93	202.11	211.30	220.49	229.67	238.86	248.05	257.23	266.42	275.61
43	144.44	154.07	163.70	173.33	182.96	192.59	202.22	211.85	221.48	231.11	240.74	250.37	260.00	269.63	279.26	288.89
44	151.24	161.32	171.41	181.49	191.57	201.65	211.74	221.82	231.90	241.98	252.07	262.15	272.23	282.32	292.40	302.48
45	158.19	168.74	179.29	189.83	200.38	210.92	221.47	232.02	242.56	253.11	263.66	274.20	284.75	295.29	305.84	316.39
46	165.30	176.32	187.34	198.36	209.38	220.40	231.42	242.44	253.46	264.48	275.50	286.52	297.54	308.56	319.58	330.60
47	172.57	184.07	195.58	207.08	218.58	230.09	241.59	253.10	264.60	276.11	287.61	299.12	310.62	322.13	333.63	345.13
48	179.99	191.99	203.99	215.99	227.99	239.98	251.98	263.98	275.98	287.98	299.98	311.98	323.98	335.98	347.98	359.98
49	187.57	200.07	212.57	225.08	237.58	250.09	262.59	275.10	287.60	300.11	312.61	325.11	337.62	350.12	362.63	375.13
50	195.30	208.32	221.34	234.36	247.38	260.40	273.42	286.44	299.46	312.48	325.50	338.52	351.54	364.56	377.58	390.60

Table 42 Carbon table for *Toona ciliata* (>50 cm diameter class) in kg/tree

Diameter at breast height (cm)	Height (m)																				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
51	276.38	294.81	313.23	331.66	350.08	368.51	386.94	405.36	423.79	442.21	460.64	479.06	497.49	515.91	534.34	552.76	571.19	589.62	608.04	626.47	644.89
52	287.33	306.48	325.64	344.79	363.95	383.10	402.26	421.41	440.57	459.72	478.88	498.03	517.19	536.34	555.50	574.65	593.81	612.96	632.12	651.27	670.43
53	298.48	318.38	338.28	358.18	378.08	397.98	417.88	437.78	457.68	477.57	497.47	517.37	537.27	557.17	577.07	596.97	616.87	636.77	656.67	676.56	696.46
54	309.85	330.51	351.17	371.82	392.48	413.14	433.80	454.45	475.11	495.77	516.42	537.08	557.74	578.39	599.05	619.71	640.37	661.02	681.68	702.34	722.99
55	321.44	342.87	364.29	385.72	407.15	428.58	450.01	471.44	492.87	514.30	535.73	557.16	578.59	600.01	621.44	642.87	664.30	685.73	707.16	728.59	750.02
56	333.23	355.45	377.66	399.88	422.09	444.31	466.52	488.74	510.95	533.17	555.39	577.60	599.82	622.03	644.25	666.46	688.68	710.89	733.11	755.32	777.54
57	345.24	368.25	391.27	414.29	437.30	460.32	483.33	506.35	529.37	552.38	575.40	598.41	621.43	644.45	667.46	690.48	713.49	736.51	759.53	782.54	805.56
58	357.46	381.29	405.12	428.95	452.78	476.61	500.44	524.27	548.10	571.93	595.76	619.59	643.43	667.26	691.09	714.92	738.75	762.58	786.41	810.24	834.07
59	369.89	394.55	419.21	443.87	468.53	493.19	517.85	542.51	567.17	591.83	616.49	641.14	665.80	690.46	715.12	739.78	764.44	789.10	813.76	838.42	863.08
60	382.54	408.04	433.54	459.04	484.55	510.05	535.55	561.05	586.56	612.06	637.56	663.06	688.56	714.07	739.57	765.07	790.57	816.08	841.58	867.08	892.58
61	395.39	421.75	448.11	474.47	500.83	527.19	553.55	579.91	606.27	632.63	658.99	685.35	711.71	738.07	764.43	790.79	817.15	843.51	869.87	896.23	922.58
62	408.46	435.69	462.93	490.16	517.39	544.62	571.85	599.08	626.31	653.54	680.77	708.00	735.23	762.47	789.70	816.93	844.16	871.39	898.62	925.85	953.08
63	421.75	449.86	477.98	506.10	534.21	562.33	590.44	618.56	646.68	674.79	702.91	731.03	759.14	787.26	815.38	843.49	871.61	899.72	927.84	955.96	984.07
64	435.24	464.26	493.27	522.29	551.31	580.32	609.34	638.35	667.37	696.39	725.40	754.42	783.43	812.45	841.47	870.48	899.50	928.51	957.53	986.55	1015.56
65	448.95	478.88	508.81	538.74	568.67	598.60	628.53	658.46	688.39	718.32	748.25	778.18	808.11	838.04	867.97	897.90	927.83	957.76	987.69	1017.62	1047.55
66	462.87	493.73	524.58	555.44	586.30	617.16	648.02	678.87	709.73	740.59	771.45	802.31	833.16	864.02	894.88	925.74	956.60	987.45	1018.31	1049.17	1080.03
67	477.00	508.80	540.60	572.40	604.20	636.00	667.80	699.60	731.40	763.20	795.00	826.80	858.60	890.40	922.20	954.00	985.80	1017.60	1049.40	1081.20	1113.00
68	491.35	524.10	556.86	589.62	622.37	655.13	687.88	720.64	753.40	786.15	818.91	851.67	884.42	917.18	949.94	982.69	1015.45	1048.21	1080.96	1113.72	1146.47
69	505.90	539.63	573.36	607.08	640.81	674.54	708.27	741.99	775.72	809.45	843.17	876.90	910.63	944.35	978.08	1011.81	1045.53	1079.26	1112.99	1146.72	1180.44
70	520.67	555.39	590.10	624.81	659.52	694.23	728.94	763.66	798.37	833.08	867.79	902.50	937.21	971.92	1006.64	1041.35	1076.06	1110.77	1145.48	1180.19	1214.91

Table 43 Volume, biomass and carbon table for *Toona ciliata* (DBH 10 -50 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
10	0.049	27.42	13.71	**31**	0.409	228.88	114.44
11	0.059	33.18	16.59	**32**	0.436	243.88	121.94
12	0.071	39.49	19.74	**33**	0.463	259.36	129.68
13	0.083	46.35	23.17	**34**	0.492	275.32	137.66
14	0.096	53.75	26.87	**35**	0.521	291.76	145.88
15	0.110	61.70	30.85	**36**	0.551	308.67	154.33
16	0.125	70.20	35.10	**37**	0.582	326.05	163.03
17	0.142	79.25	39.63	**38**	0.614	343.91	171.96
18	0.159	88.85	44.43	**39**	0.647	362.25	181.13
19	0.177	99.00	49.50	**40**	0.680	381.07	190.53
20	0.196	109.69	54.85	**41**	0.715	400.36	200.18
21	0.216	120.94	60.47	**42**	0.750	420.13	210.06
22	0.237	132.73	66.36	**43**	0.786	440.37	220.19
23	0.259	145.07	72.53	**44**	0.823	461.09	230.55
24	0.282	157.96	78.98	**45**	0.861	482.29	241.15
25	0.306	171.40	85.70	**46**	0.900	503.96	251.98
26	0.331	185.38	92.69	**47**	0.939	526.11	263.06
27	0.357	199.92	99.96	**48**	0.980	548.74	274.37
28	0.384	215.00	107.50	**49**	1.021	571.84	285.92
29	0.412	230.63	115.31	**50**	1.063	595.42	297.71
30	0.441	246.81	123.40				

Table 44 Volume, biomass and carbon table for *Toona ciliata* (DBH 51-100 cm)

DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)	DBH (cm)	Volume (m^3)	Biomass (kg/tree)	Carbon (kg/tree)
51	1.714	960.019	480.01	**76**	3.807	2131.898	1065.95
52	1.782	998.036	499.02	**77**	3.908	2188.370	1094.19
53	1.851	1036.791	518.40	**78**	4.010	2245.580	1122.79
54	1.922	1076.284	538.14	**79**	4.113	2303.528	1151.76
55	1.994	1116.515	558.26	**80**	4.218	2362.214	1181.11
56	2.067	1157.485	578.74	**81**	4.324	2421.639	1210.82
57	2.141	1199.193	599.60	**82**	4.432	2481.802	1240.90
58	2.217	1241.639	620.82	**83**	4.541	2542.702	1271.35
69	2.294	1284.823	642.41	**84**	4.651	2604.341	1302.17
60	2.373	1328.746	664.37	**85**	4.762	2666.719	1333.36
61	2.453	1373.406	686.70	**86**	4.875	2729.834	1364.92
62	2.534	1418.805	709.40	**87**	4.989	2793.688	1396.84
63	2.616	1464.942	732.47	**88**	5.104	2858.279	1429.14
64	2.700	1511.817	755.91	**89**	5.221	2923.609	1461.80
65	2.785	1559.431	779.72	**90**	5.339	2989.678	1494.84
66	2.871	1607.782	803.89	**91**	5.458	3056.484	1528.24
67	2.959	1656.872	828.44	**92**	5.579	3124.029	1562.01
68	3.048	1706.700	853.35	**93**	5.701	3192.311	1596.16
69	3.138	1757.266	878.63	**94**	5.824	3261.332	1630.67
70	3.230	1808.570	904.29	**95**	5.948	3331.091	1665.55
71	3.323	1860.613	930.31	**96**	6.074	3401.589	1700.79
72	3.417	1913.394	956.70	**97**	6.201	3472.824	1736.41
73	3.512	1966.913	983.46	**98**	6.330	3544.798	1772.40
74	3.609	2021.170	1010.58	**99**	6.460	3617.510	1808.75
75	3.707	2076.165	1038.08	**100**	6.591	3690.960	1845.48