Mathematical Models for Estimating Stem Volume and Volume Tables of Rubber Tree

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MATHEMATICAL MODELS FOR ESTIMATING STEM VOLUME AND VOLUME TABLES OF RUBBER TREE (*HEVEA BRASILIENSIS.* MUELL ARG.)

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Introduction

Rubber tree (*Hevea brasiliensis.* Muell Arg.) is an indigenous to the natural forests of Amazon valley in South America. A few seedlings of this species were first introduced in Bangladesh in 1910 to the tea gardens of Baromashia under Fatikchari upzilla in Chittagong district and Amu of Sylhet district from Calcutta Botanical Garden (Ali 1985). Experimental plantations of the species were done in 1954 by Forest Department at Madhupur of Tangail, Hazarikheel of Chittagong and Tetulia of Panchaghar districts. In 1960, commercial plantations were first done by Forest Department in four hectares land at Raojan of Chittagong and 12 ha at Ramu of Cox's Bazar districts. In 1962 commercial plantations of rubber was handed over to Bangladesh Forest Industries Development Corporation (BFIDC), which then made further plantations in Chittagong, Sylhet, Tangail and Sherpur regions of Bangladesh (BFIDC, 1995). During the period between 1962 and 1997, Chittagong Hill Tracts Development Board (CHTDB), several multi-national companies and private entrepreneurs raised rubber plantations. Until 2005, all these organizations raised about 27,386 ha of rubber plantations in the country (Sarkar 2006).

Rubber plantations initially was done mainly for latex production and till today all efforts given to increase latex yield. In most cases both government and private owners are in loss selling produced latex only (Arokiaraj *et al*. 2002). Thus, use of rubber wood in making furniture and other end products in addition to latex production would be profitable (Tissari 2002). In Malaysia, rubber wood is extensively used in wood processing industries. The utilization of rubber wood as furniture, pulp, plywood, decorative veneer and novelty items was initiated by Forest Research Institute Malaysia in 1953 (Peel 1958, Peel and Peh 1960), and export of furniture made from rubber wood doubled in 2008 compared to 1998 (Arokiaraj *et al*. 2002). Thailand and Indonesia have also been actively processing and utilizing rubber wood in furniture making to export world wide (Ratnasingam and Scholz 2008).

In Bangladesh, ages of some rubber tree plantations done by BFIDC were reached to more than 40 years, after which the trees ceased latex production. The trees after clear felling needed replanting the area. To estimate the production of total volume and timber volume for rubber tree, before clear felling it is necessary the volume table to estimate volumes. The

volume tables of trees are also necessary for economic evaluation, future management, utilization, research purposes and to estimate the quantity of wood during harvest of the tree species (Latif *et al.* 2001). But, volume tables for rubber tree, planted are not available in Bangladesh. This bulletin presents the methods and equations derived for volume estimation and stand volume tables preparation for rubber tree and different clones on the basis of equations best suited.

Materials and Methods

Measurement of trees

Data were collected from available plantations in established rubber gardens in Bangladesh during January 2011 to June 2011. A total of 583 standing rubber trees representing different girth classes were selected at random for preparation of mathematical volume functions and tables. Out of these 583 trees 195 were standing clone PRIM-600 trees and 388 standing seedling origin rubber trees. Tree girths at breast height (GBH) in cm and total height in meter were measured with measuring tape and Haga-altimeter respectively. The collected data were categorized on the basis of GBH and height of the trees. The GBH-height class distribution of the sample trees are given in table 1. The girth and bark thickness at one meter intervals were measured by climbing the trees with a ladder. The bark thicknesses of the samples were measured with a bark gauge.

Table 1: GBH and total height class distribution of the sampled trees selected for volume estimation of rubber tree.

Species	GBH (cm)	Number of tree in the Height (m) class					
		9	14	19	24	29	Total
Combined	40	14	40				54
	60	2	70	31	6	1	110
	80	1	44	44	6		95
	100		18	36	21	1	76
	120		12	44	25	12	93
	140		6	43	23	15	87
	160		1	23	19	2	45
	180			4	9		13
	200			2	5		7
	240				2	1	3
	Total	**17**	**191**	**227**	**116**	**32**	**583**

Species	GBH (cm)	Number of tree in the Height (m) class					
		9	14	19	24	29	Total
Seedling origin tree	40	8	29				37
	60		65	11			76
	80		27	25	2		54
	100		12	19	9		40
	120		10	38	3		51
	140		6	42	16		64
	160		1	23	19		43
	180			4	9		13
	200			2	5		7
	240				2	1	3
	Total	**8**	**150**	**164**	**65**	**1**	**388**
Clone PRIM-600	40	6	11				17
	60	2	5	20	6	1	34
	80	1	17	19	4		41
	100		6	17	12	1	36
	120		2	6	22	12	42
	140			1	7	15	23
	160					2	2
	180						
	200						
	240						
	Total	**9**	**41**	**63**	**51**	**31**	**195**

Compilation of data

Volumes of all sections except top and bottom section were determined by using the mean cross-sectional areas of the two ends of each section following Smalian's formula cubic volume = $[(B+b)/2]L$, where B= the cross-sectional area at the large end of the log, b= the cross-sectional area at the small end of the log, and L= log length (Anon. 2011). In determining the volume of bottom sections, the formulae used for calculating the volume of a cylinder was considered. Assuming the top section as cone the volume was computed to one third of the cylindrical volume of the portion. We considered the top end diameter measurement for each tree as the base diameter of the cone. In computing the under bark volume of the tree the volume of top section i.e. cone was ignored. The volume of the tree is the sum of the volume of total sections found in a tree. The individual tree volumes (V), GBH (G) and total height (H) were variable in regression techniques using various functions and transformations as required in the models.

Computation of volume function

Multiple regression analysis techniques were used to select the best suited model equations. The following 15 models were tested to select the equation of best fit with different variables as follows.

1. $V = a + bG$
2. $V = a + bG + cG^2$
3. $V = a + bG^2$
4. $V = bG + cG^2$
5. $V = a + bG^2H$
6. $V = a + bG + cH$
7. $V = a + bG + cG^2H$
8. $V = a + bG + cGH$
9. $V = a + bG + cH + dGH$
10. $V = a + bG + cH + dG^2H$
11. $V = a + bG^2 + cH + dGH$
12. $V = a + bG^2 + cH + dG^2H$
13. $V = a + bG^2 + cGH + dG^2H$
14. $\log(V) = a + b\log(G)$
15. $\log(V) = a + b\log(G) + c\log(H)$

Where: V = total volume over bark in cubic meters,

G = girth at breast height in centimeters,

H = total height in meters,

a = the regression constant and b, c and d are regression coefficients.

The logarithmic functions are to the base e.

Following original and transformed variables were used to select the best suited regression models:

Dependent variables: V, Log (V),

Independent variables: G, G^2, H, GH, G^2H, Log (G), Log(H)

The dependent variables mentioned above were regressed with the independent variables.

The equations of the best fit based on the highest multiple coefficients of determination; F-ratio and lowest residual mean square were chosen. Models for estimation of the total volume over bark, total volume under bark and timber volume were selected. The volumes up to 50 cm top end girth may be used as timber for the species. The volumes less up to 50 cm girth may be used for poles, house posts and fuel wood.

Model Validation

Statistical validation: The best suited models were tested with a set of data recollected from 30 trees of different girth classes and complied in the same procedure as earlier. The actual volumes of these trees were collectively compared with the corresponding volume predicted by the selected models. The independent tests for validation were the absolute deviation percent, paired t-test, chi-square test and 45 degree line test (Islam *et al.* 1992). The independent tests for validation criteria were:

(1) The paired t-test:

$$t = \left| \frac{\sum (A - E)}{n} \right|$$ (Dawkins 1975) with n-1 degrees of freedom at 5% level.

(2) Chi-square test:

$$\chi^2 = \frac{\sum (A - E)^2}{E}$$ with n-1 degrees of freedom at 5% level.

(3) Percent Absolute Deviation (%AD)

$$\%AD = \frac{\left| \sum (A - E) \right|}{\sum A} \times 100$$

Where, A = Actual volume, E = Estimated volume

Biological principle tests: The predicted values were plotted against girth at breast height (one way) for different segment. The biological requirement is that the yield curves should be monotonically increasing (Latif *et al* 2001).

Results and Discussions

The regression model numbers 2, 7, 9, 11, 14 and 15 showed the highest value of coefficients of determination for one way and two way volume equations in combined, seedling

origin tree and Clone PRIM 600 rubber trees. The volume equations have been selected for estimation of the total volume over bark (V_{ob}) & total volume under bark (V_{ub}) and timber volume overbark ($V_{Timob)}$ & under bark ($V_{Timub)}$ from these models. The coefficients of determination for selected volume equations are within 0.83 to 0.98 of different species of rubber trees of different proportion are given table 2. This means that the selected models describe over 83 to 98 percent of the total variations. The best fitted models were selected for estimation of volume on GBH (G) and total height (H). The selected volume equations the clones and seedling origin rubber trees of different proportions are given in table 2.

Table 2: Volume equation of rubber tree at different proportion

Species	Volume equations	R^2	N
Combined	$\ln(V_{ob}) = -10.5628+2.1502\times\ln(G)$	0.95	583
	$\ln(V_{ob}) = -11.2768+1.8795\times\ln(G)+0.6928\times\ln(H)$	0.97	583
	$\ln(V_{ub}) = -10.6451+2.1607\times\ln(G)$	0.95	583
	$\ln(V_{ub}) = -11.3509+1.8930\times\ln(G)+0.6848\times\log(H)$	0.97	583
	$V_{Timob} = -0.2758+0.0036\times G+0.000031\times G^2$	0.86	466
	$V_{Timub} = -0.2598+0.0033\times G+0.00003\times G^2$	0.86	466
	$V_{Timob} = 0.0302+0.000006\times G^2-0.0288\times H+0.00046\times G\times H$	0.91	466
	$V_{Timub} = 0.02506+0.0000064\times G^2-0.02766\times H+0.00044\times G\times H$	0.91	466
Seedling origin tree	$\ln(V_{ob}) = -10.4946+2.1365\times\ln(G)$	0.93	388
	$\ln(V_{ob}) = -11.355075+1.90505\times\ln(G)+0.67956\times\ln(H)$	0.96	388
	$\ln(V_{ub}) = -10.58495+2.14861\times\ln(G)$	0.93	388
	$\ln(V_{ub}) = -11.43443+1.92013\times\ln(G)+0.670876\times\ln(H)$	0.96	388
	$V_{Timob} = -0.380878+0.00564\times G+0.000021\times G^2$	0.83	297
	$V_{Timob} = 0.1795125-0.000825\times G-0.04131\times H+0.00058\times G\times H$	0.89	297
	$V_{Timub} = -0.36448+0.0053378\times G+0.0000215\times G^2$	0.83	297
	$V_{Timub} = 0.180655-0.000846\times G-0.040676\times H+0.00057\times G\times H$	0.89	297
Clone PRIM 600	$V_{ob} = 0.01097-0.00064\times G+0.000055\times G^2$	0.96	195
	$V_{ob} = -0.04833+0.00215\times G+0.0000019\times G^2\times H$	0.97	195
	$V_{ub} = 0.016931-0.00085\times G+0.000055\times G^2$	0.96	195
	$V_{ub} = -0.04296+0.00195\times G+0.0000019\times G^2\times H$	0.98	195

	V_{Timob} = -0.03239-0.001618×G+0.000053×G^2	0.96	101
	V_{Timob} = -0.128147+0.00171×G+0.0000017×G^2×H	0.96	101
	V_{Timub} = -0.021049-0.00185×G+0.000053×G^2	0.96	101
	V_{Timub} = -0.11859+0.00152×G+0.0000017×G^2×H	0.96	101

Where:

G = girth at breast height in centimeter

H = total height in meters

V_{ob} = total volume over bark in cubic meters

V_{ub} = total volume under bark in cubic meters

V_{Timob} = timber volume over bark in cubic meters

V_{Timub} = timber volume under bark in cubic meters

Validation of the selected models

The models developed for volume estimation of rubber tree were verified with the volumes of 30 trees of the clones and seedling origin measured for rubber tree with paired t-test, chi-square test of goodness of fit and 45 degree line test. The computed, t-values and chi-square are less than the tabular values ($t = 2.045$ and $\chi^2 = 42.56$) at 5% level of significance. The predicted values tend to make an angle of about 45 degree. This means that there is no significant difference between the observed and the predicted values. The t-values, chi-square and slopes are given below:

Table 3: Different statistics of the selected volume equations/functions

Species	Type of model	t-value	chi-square value	slope (Degree)
Combination	1 Way	1.030	1.76264	44
	2 Way	0.738	1.03989	44
Seedling origin tree	1 Way	0.548	0.63088	44
	2 Way	-0.474	0.30755	45
Clone PRIM600	1 Way	-0.362	0.34807	43
	2 Way	-0.411	0.31732	43

Therefore, the selected models may be used for rubber tree species within the data range for preparation of the volume tables. After the validation test, volume tables for various proportions of different species were prepared for ready use and are presented in table 4 to 16.

The selected volume models of two segment viz. namely total volume over bark, and timber volume over bark of rubber tree of different of the clones and seedling origin also satisfied biological criteria of yield curves. The predicted values of total volume over bark and timber volume over bark were plotted against girth at breast height. The growth curves conform with the ideal attributes of biological growth curve. The yield curves are monotonically increasing (Fig-1) with girth at breast height.

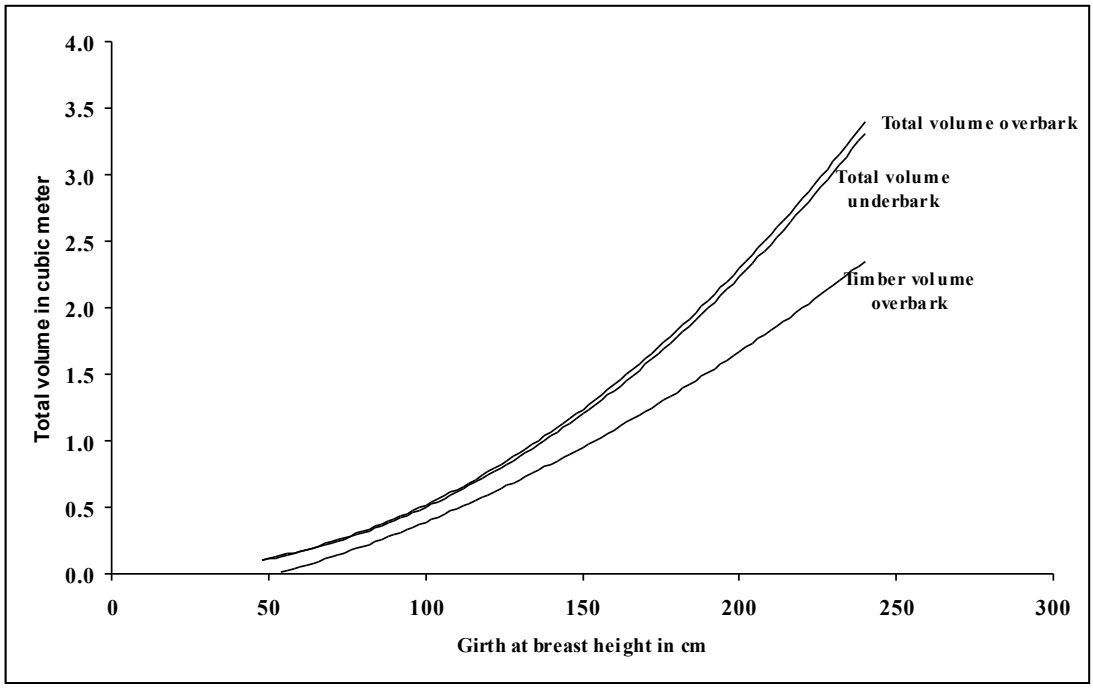

Figure-1: Growth curves of rubber tree (Combination) in different segment

GBH-Basal Girth (BG) Relationships:

Sometimes the trees are removed without recording the girth at breast height (GBH) and total height. Then, It is not possible to estimate the volumes of the removed trees. But it is necessary to have the estimates of volumes of the removed trees to have an account of the harvest from the plantations. The stump girths can be measured while the stumps are still there after removal of the trees. Therefore, GBH and stump girth (basal girth at about 15 cm above ground level) were established to estimate the GBH of the removed trees first followed by the estimation of the volume of the removed trees. The GBH and stump girth (BG) of the rubber tree (Combination, Seedling origin tree and Clone PRIM-600) are given below:

Combination	GBH = 8.0464+0.6987×BG	R^2=0.93
Seedling origin tree	GBH = 15.4595+0.6554×BG	R^2=0.91
Clone PRIM-600	GBH = -1.0747+0.7594×BG	R^2=0.94

We estimate volume for ready use and presented in Tables 4-16. The volume equations and tables are applicable for rubber tree (Combination, Seedling and PRIM600) planted in Bangladesh.

Confidence limit

These volume tables should not be used to estimate volumes of individual trees in a stand. These tables may be used for the mean tree of a stand which may be multiplied by the number of stems to get the total volume of the stand. Estimation of the volumes for the trees outside the height and GBH ranges shown in the stand table should only be done with caution.

Procedures to use Volume equations and Tables

Take the measurements of girth(s) at breast height (GBH) and total height(s) of the desired tree(s). Then, choose the corresponding volume equations and then substitute these values in predicted equation of the species. For example, let the GBH and height of a selected combined rubber tree are 90 cm and 20 m respectively. Then, the total volume for this tree is:

$$\ln(V_{ob}) = -11.2768+1.8795\times\ln(G)+0.6928\times\ln(H)$$

$$= -11.2768+1.8795\times\ln(90)+0.6928\times\ln(20)$$

$$= -0.7442$$

$$V = \text{Exp.}(\ln(V)) = 0.475\ m^3$$

If the measured GBH and total height coincide with the tabular GBH and total height then the tabular values may only be used directly. The one way volume table (GBH-volume tables and equations) may similarly be used. The girths have to divide by the factor 2.54 to get inches from centimeters. The height should be multiplied with 3.281 to convert meter into feet. Similarly, volume should be multiplied by the factor 35.32 to get cubic feet from cubic meters.

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Table 4: One way volume table in cubic meter for rubber tree growing in Bangladesh

Girth breast height (cm)	Combined (Clone PRIM 600 and Seedling origin tree)				Seedling origin tree Volume				Clone PRIM-600 trees			
	Total Volume (m^3)		Timber Volume (m^3)		Total Volume (m^3)		Timber Volume (m^3)		Total Volume (m^3)		Timber Volume (m^3)	
	Over bark	Under bark	Over bark	Under bark	Over bark	Under bark	Over Bark	Under Bark	Over bark	Under Bark	Over bark	Under bark
30	0.0388	0.0370			0.0396	0.0377			0.0418	0.0413		
32	0.0446	0.0426			0.0455	0.0434			0.0474	0.0465		
34	0.0508	0.0485			0.0518	0.0494			0.0535	0.0521		
36	0.0574	0.0549			0.0585	0.0558			0.0600	0.0582		
38	0.0645	0.0617			0.0657	0.0627			0.0669	0.0647		
40	0.0720	0.0689			0.0733	0.0700			0.0743	0.0716		
42	0.0800	0.0766			0.0813	0.0778			0.0821	0.0790		
44	0.0884	0.0847			0.0898	0.0859			0.0904	0.0868		
46	0.0973	0.0932			0.0988	0.0945			0.0991	0.0951		
48	0.1066	0.1022			0.1082	0.1036			0.1083	0.1038		
50	0.1164	0.1116			0.1181	0.1131			0.1179	0.1130	0.0196	0.0195
52	0.1266	0.1215			0.1284	0.1230			0.1280	0.1226	0.0273	0.0267
54	0.1373	0.1318	0.0069	0.0070	0.1392	0.1334			0.1385	0.1326	0.0353	0.0343
56	0.1485	0.1426	0.0208	0.0203	0.1504	0.1443			0.1494	0.1431	0.0438	0.0423
58	0.1601	0.1538	0.0350	0.0339	0.1621	0.1556	0.0184	0.0176	0.1608	0.1540	0.0526	0.0507
60	0.1722	0.1655	0.0494	0.0477	0.1743	0.1673	0.0347	0.0333	0.1726	0.1654	0.0620	0.0596
62	0.1848	0.1777	0.0640	0.0618	0.1869	0.1795	0.0512	0.0492	0.1849	0.1772	0.0717	0.0688
64	0.1979	0.1903	0.0789	0.0761	0.2001	0.1922	0.0679	0.0654	0.1976	0.1895	0.0819	0.0786
66	0.2114	0.2034	0.0940	0.0906	0.2137	0.2054	0.0848	0.0816	0.2108	0.2022	0.0924	0.0887
68	0.2254	0.2169	0.1094	0.1054	0.2277	0.2190	0.1018	0.0981	0.2244	0.2153	0.1035	0.0993
70	0.2399	0.2310	0.1251	0.1205	0.2423	0.2330	0.1190	0.1147	0.2384	0.2289	0.1149	0.1102
72	0.2549	0.2455	0.1409	0.1358	0.2573	0.2476	0.1364	0.1315	0.2529	0.2430	0.1268	0.1217
74	0.2703	0.2604	0.1570	0.1514	0.2728	0.2626	0.1539	0.1484	0.2678	0.2574	0.1391	0.1335
76	0.2863	0.2759	0.1734	0.1672	0.2888	0.2781	0.1716	0.1656	0.2832	0.2723	0.1518	0.1458
78	0.3027	0.2918	0.1900	0.1832	0.3053	0.2940	0.1895	0.1829	0.2991	0.2877	0.1649	0.1584
80	0.3197	0.3082	0.2069	0.1995	0.3223	0.3105	0.2076	0.2004	0.3153	0.3035	0.1785	0.1716
82	0.3371	0.3251	0.2240	0.2160	0.3397	0.3274	0.2258	0.2180	0.3320	0.3198	0.1925	0.1851
84	0.3550	0.3425	0.2413	0.2328	0.3577	0.3448	0.2442	0.2359	0.3492	0.3364	0.2069	0.1991
86	0.3735	0.3603	0.2589	0.2498	0.3761	0.3627	0.2628	0.2539	0.3668	0.3536	0.2217	0.2135
88	0.3924	0.3787	0.2767	0.2671	0.3950	0.3810	0.2815	0.2720	0.3848	0.3712	0.2370	0.2283
90	0.4118	0.3975	0.2948	0.2846	0.4145	0.3999	0.3004	0.2904	0.4033	0.3892	0.2527	0.2435
92	0.4317	0.4169	0.3131	0.3024	0.4344	0.4192	0.3195	0.3089	0.4223	0.4076	0.2688	0.2592
94	0.4522	0.4367	0.3317	0.3204	0.4548	0.4390	0.3388	0.3276	0.4417	0.4265	0.2854	0.2753
96	0.4731	0.4570	0.3505	0.3387	0.4757	0.4594	0.3582	0.3464	0.4615	0.4459	0.3023	0.2918
98	0.4946	0.4778	0.3696	0.3572	0.4972	0.4802	0.3778	0.3655	0.4817	0.4657	0.3197	0.3088
100	0.5165	0.4992	0.3889	0.3759	0.5191	0.5015	0.3976	0.3847	0.5025	0.4859	0.3376	0.3261
102	0.5390	0.5210	0.4085	0.3949	0.5415	0.5233	0.4175	0.4040	0.5236	0.5066	0.3558	0.3439
104	0.5620	0.5433	0.4283	0.4142	0.5645	0.5456	0.4376	0.4236	0.5452	0.5277	0.3745	0.3622
106	0.5855	0.5661	0.4483	0.4337	0.5879	0.5684	0.4579	0.4433	0.5673	0.5493	0.3936	0.3808
108	0.6095	0.5895	0.4686	0.4534	0.6119	0.5916	0.4784	0.4632	0.5898	0.5713	0.4131	0.3999
110	0.6340	0.6133	0.4891	0.4734	0.6363	0.6154	0.4990	0.4833	0.6127	0.5937	0.4330	0.4194
112	0.6591	0.6377	0.5099	0.4936	0.6613	0.6397	0.5198	0.5035	0.6361	0.6166	0.4534	0.4393
114	0.6846	0.6625	0.5309	0.5141	0.6868	0.6645	0.5408	0.5239	0.6599	0.6399	0.4742	0.4597
116	0.7107	0.6879	0.5522	0.5348	0.7128	0.6898	0.5619	0.5445	0.6842	0.6637	0.4954	0.4804
118	0.7373	0.7138	0.5737	0.5558	0.7393	0.7156	0.5832	0.5653	0.7089	0.6879	0.5171	0.5016
120	0.7645	0.7402	0.5955	0.5770	0.7663	0.7419	0.6047	0.5862	0.7340	0.7126	0.5392	0.5233
122	0.7921	0.7671	0.6175	0.5985	0.7939	0.7688	0.6264	0.6073	0.7596	0.7377	0.5617	0.5453

Girth breast height (cm)	Combined (Clone PRIM 600 and Seedling origin tree)				Seedling origin tree Volume				Clone PRIM-600 trees			
	Total Volume (m^3)		Timber Volume (m^3)		Total Volume (m^3)		Timber Volume (m^3)		Total Volume (m^3)		Timber Volume (m^3)	
	Over bark	Under bark	Over bark	Under bark	Over bark	Under bark	Over Bark	Under Bark	Over bark	Under Bark	Over bark	Under bark
124	0.8203	0.7945	0.6398	0.6202	0.8219	0.7961	0.6482	0.6285	0.7857	0.7633	0.5846	0.5678
126	0.8490	0.8225	0.6623	0.6422	0.8505	0.8240	0.6702	0.6500	0.8121	0.7893	0.6079	0.5907
128	0.8783	0.8509	0.6850	0.6644	0.8796	0.8523	0.6924	0.6716	0.8391	0.8157	0.6317	0.6140
130	0.9080	0.8799	0.7080	0.6868	0.9093	0.8812	0.7148	0.6934	0.8665	0.8426	0.6559	0.6378
132	0.9383	0.9094	0.7312	0.7095	0.9394	0.9106	0.7373	0.7154	0.8943	0.8699	0.6806	0.6620
134	0.9692	0.9395	0.7547	0.7325	0.9701	0.9405	0.7600	0.7375	0.9225	0.8977	0.7056	0.6866
136	1.0005	0.9700	0.7784	0.7557	1.0013	0.9709	0.7828	0.7598	0.9512	0.9259	0.7311	0.7116
138	1.0324	1.0011	0.8024	0.7791	1.0330	1.0018	0.8059	0.7823	0.9804	0.9545	0.7570	0.7371
140	1.0649	1.0327	0.8266	0.8028	1.0652	1.0333	0.8291	0.8049	1.0100	0.9836	0.7833	0.7630
142	1.0979	1.0649	0.8511	0.8267	1.0980	1.0653	0.8524	0.8277	1.0400	1.0132	0.8101	0.7893
144	1.1314	1.0975	0.8758	0.8509	1.1313	1.0978	0.8760	0.8507	1.0705	1.0431	0.8373	0.8160
146	1.1654	1.1307	0.9008	0.8753	1.1652	1.1308	0.8997	0.8739	1.1014	1.0736	0.8649	0.8432
148	1.2000	1.1645	0.9260	0.9000	1.1995	1.1643	0.9236	0.8972	1.1328	1.1044	0.8929	0.8708
150	1.2352	1.1987	0.9514	0.9249	1.2344	1.1984	0.9477	0.9208	1.1646	1.1357	0.9213	0.8988
152	1.2709	1.2335	0.9771	0.9501	1.2699	1.2330	0.9719	0.9444	1.1969	1.1675	0.9502	0.9272
154	1.3071	1.2689	1.0030	0.9755	1.3058	1.2681	0.9963	0.9683	1.2296	1.1997	0.9795	0.9561
156	1.3439	1.3048	1.0292	1.0011	1.3423	1.3038	1.0209	0.9923	1.2628	1.2323	1.0093	0.9854
158	1.3812	1.3412	1.0557	1.0270	1.3794	1.3399	1.0456	1.0165	1.2963	1.2654	1.0394	1.0151
160	1.4191	1.3781	1.0823	1.0532	1.4169	1.3766	1.0705	1.0409	1.3304	1.2989	1.0700	1.0452
162	1.4575	1.4156	1.1092	1.0796	1.4550	1.4139	1.0956	1.0654	1.3649	1.3329	1.1010	1.0758
164	1.4964	1.4536	1.1364	1.1062	1.4937	1.4516	1.1209	1.0902	1.3998	1.3673	1.1325	1.1068
166	1.5360	1.4922	1.1638	1.1331	1.5329	1.4900	1.1463	1.1150	1.4352	1.4022	1.1643	1.1382
168	1.5760	1.5313	1.1915	1.1602	1.5726	1.5288	1.1719	1.1401	1.4710	1.4374	1.1966	1.1701
170	1.6166	1.5710	1.2194	1.1876	1.6129	1.5682	1.1977	1.1653	1.5072	1.4732	1.2293	1.2023
172	1.6578	1.6112	1.2475	1.2153	1.6537	1.6081	1.2237	1.1907	1.5439	1.5094	1.2624	1.2350
174	1.6995	1.6520	1.2759	1.2431	1.6950	1.6485	1.2498	1.2163	1.5811	1.5460	1.2960	1.2681
176	1.7418	1.6933	1.3046	1.2713	1.7369	1.6895	1.2761	1.2421	1.6187	1.5831	1.3300	1.3017
178	1.7847	1.7351	1.3334	1.2996	1.7794	1.7310	1.3026	1.2680	1.6567	1.6206	1.3644	1.3357
180	1.8281	1.7775	1.3626	1.3282	1.8224	1.7731	1.3292	1.2941	1.6952	1.6585	1.3992	1.3701
182	1.8720	1.8204	1.3919	1.3571	1.8659	1.8157	1.3560	1.3204	1.7341	1.6969	1.4345	1.4049
184	1.9165	1.8639	1.4216	1.3862	1.9100	1.8588	1.3830	1.3468	1.7735	1.7358	1.4702	1.4401
186	1.9616	1.9080	1.4514	1.4156	1.9546	1.9025	1.4101	1.3734	1.8133	1.7751	1.5063	1.4758
188	2.0072	1.9526	1.4815	1.4452	1.9998	1.9467	1.4375	1.4002	1.8536	1.8148	1.5429	1.5119
190	2.0534	1.9978	1.5119	1.4750	2.0455	1.9915	1.4649	1.4272	1.8943	1.8550	1.5798	1.5484
192	2.1002	2.0435	1.5425	1.5051	2.0918	2.0368	1.4926	1.4543	1.9354	1.8956	1.6172	1.5854
194	2.1475	2.0898	1.5733	1.5354	2.1386	2.0827	1.5205	1.4816	1.9770	1.9366	1.6550	1.6228
196	2.1954	2.1366	1.6044	1.5660	2.1860	2.1291	1.5485	1.5091	2.0190	1.9781	1.6933	1.6606
198	2.2438	2.1840	1.6358	1.5969	2.2339	2.1760	1.5766	1.5367	2.0615	2.0201	1.7319	1.6988
200	2.2929	2.2319	1.6674	1.6279	2.2824	2.2235	1.6050	1.5645	2.1044	2.0624	1.7710	1.7375

Table 5: Two way total volume table over bark in cubic meter for rubber tree growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
30	0.0262	0.0319	0.0373	0.0423	0.0471	0.0516	0.0560	0.0603	0.0644	0.0684	0.0723
32	0.0295	0.0361	0.0421	0.0478	0.0531	0.0583	0.0632	0.0680	0.0727	0.0772	0.0816
34	0.0331	0.0404	0.0472	0.0535	0.0596	0.0653	0.0709	0.0762	0.0815	0.0865	0.0914
36	0.0369	0.0450	0.0525	0.0596	0.0663	0.0727	0.0789	0.0849	0.0907	0.0963	0.1018
38	0.0408	0.0498	0.0581	0.0660	0.0734	0.0805	0.0874	0.0940	0.1004	0.1066	0.1127
40	0.0449	0.0549	0.0640	0.0726	0.0808	0.0887	0.0962	0.1035	0.1105	0.1174	0.1241
42	0.0493	0.0601	0.0702	0.0796	0.0886	0.0972	0.1054	0.1134	0.1212	0.1287	0.1360
44	0.0538	0.0656	0.0766	0.0869	0.0967	0.1061	0.1151	0.1238	0.1322	0.1405	0.1485
46	0.0584	0.0713	0.0833	0.0945	0.1051	0.1153	0.1251	0.1346	0.1438	0.1527	0.1614
48	0.0633	0.0773	0.0902	0.1023	0.1139	0.1249	0.1355	0.1458	0.1557	0.1654	0.1748
50	0.0684	0.0834	0.0974	0.1105	0.1229	0.1349	0.1463	0.1574	0.1681	0.1786	0.1888
52	0.0736	0.0898	0.1048	0.1189	0.1323	0.1452	0.1575	0.1694	0.1810	0.1923	0.2032
54	0.0790	0.0964	0.1125	0.1277	0.1421	0.1558	0.1691	0.1819	0.1943	0.2064	0.2182
56	0.0846	0.1032	0.1205	0.1367	0.1521	0.1669	0.1811	0.1948	0.2081	0.2210	0.2336
58	0.0903	0.1103	0.1287	0.1460	0.1625	0.1782	0.1934	0.2080	0.2222	0.2361	0.2495
60	0.0963	0.1175	0.1372	0.1556	0.1732	0.1900	0.2061	0.2217	0.2369	0.2516	0.2659
62	0.1024	0.1250	0.1459	0.1655	0.1842	0.2021	0.2192	0.2358	0.2519	0.2676	0.2828
64	0.1087	0.1327	0.1549	0.1757	0.1955	0.2145	0.2327	0.2503	0.2674	0.2840	0.3002
66	0.1152	0.1406	0.1641	0.1862	0.2072	0.2272	0.2466	0.2652	0.2833	0.3009	0.3181
68	0.1218	0.1487	0.1736	0.1969	0.2191	0.2404	0.2608	0.2805	0.2997	0.3183	0.3365
70	0.1287	0.1570	0.1833	0.2080	0.2314	0.2538	0.2754	0.2962	0.3165	0.3361	0.3553
72	0.1356	0.1656	0.1932	0.2193	0.2440	0.2676	0.2904	0.3124	0.3337	0.3544	0.3746
74	0.1428	0.1743	0.2035	0.2308	0.2569	0.2818	0.3057	0.3289	0.3513	0.3731	0.3944
76	0.1502	0.1833	0.2139	0.2427	0.2701	0.2962	0.3214	0.3458	0.3694	0.3923	0.4147
78	0.1577	0.1924	0.2246	0.2549	0.2836	0.3111	0.3375	0.3631	0.3878	0.4119	0.4354
80	0.1654	0.2018	0.2356	0.2673	0.2974	0.3262	0.3540	0.3808	0.4068	0.4320	0.4567
82	0.1732	0.2114	0.2467	0.2800	0.3115	0.3417	0.3708	0.3988	0.4261	0.4525	0.4783
84	0.1812	0.2212	0.2582	0.2929	0.3260	0.3576	0.3879	0.4173	0.4458	0.4735	0.5005
86	0.1894	0.2312	0.2699	0.3062	0.3407	0.3737	0.4055	0.4362	0.4660	0.4949	0.5231
88	0.1978	0.2414	0.2818	0.3197	0.3557	0.3902	0.4234	0.4555	0.4865	0.5168	0.5462
90	0.2063	0.2518	0.2939	0.3335	0.3711	0.4071	0.4417	0.4751	0.5075	0.5391	0.5698
92	0.2150	0.2624	0.3063	0.3476	0.3867	0.4242	0.4603	0.4951	0.5289	0.5618	0.5938
94	0.2239	0.2733	0.3190	0.3619	0.4027	0.4417	0.4793	0.5156	0.5508	0.5850	0.6183
96	0.2329	0.2843	0.3318	0.3765	0.4189	0.4595	0.4986	0.5364	0.5730	0.6086	0.6433
98	0.2421	0.2955	0.3449	0.3914	0.4355	0.4777	0.5183	0.5576	0.5956	0.6326	0.6687
100	0.2515	0.3070	0.3583	0.4065	0.4524	0.4962	0.5384	0.5791	0.6187	0.6571	0.6946
102	0.2610	0.3186	0.3719	0.4219	0.4695	0.5150	0.5588	0.6011	0.6421	0.6820	0.7209
104	0.2707	0.3305	0.3857	0.4376	0.4870	0.5342	0.5796	0.6235	0.6660	0.7074	0.7477
106	0.2806	0.3425	0.3998	0.4536	0.5047	0.5536	0.6007	0.6462	0.6903	0.7332	0.7750
108	0.2906	0.3547	0.4141	0.4698	0.5228	0.5734	0.6222	0.6693	0.7150	0.7594	0.8027
110	0.3008	0.3672	0.4286	0.4863	0.5411	0.5935	0.6440	0.6928	0.7401	0.7860	0.8309

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
112	0.3112	0.3798	0.4433	0.5030	0.5597	0.6140	0.6662	0.7166	0.7655	0.8131	0.8595
114	0.3217	0.3927	0.4583	0.5201	0.5787	0.6347	0.6887	0.7409	0.7914	0.8406	0.8885
116	0.3324	0.4057	0.4736	0.5373	0.5979	0.6558	0.7116	0.7655	0.8177	0.8685	0.9181
118	0.3433	0.4190	0.4890	0.5549	0.6174	0.6773	0.7348	0.7905	0.8444	0.8969	0.9480
120	0.3543	0.4324	0.5047	0.5727	0.6372	0.6990	0.7584	0.8158	0.8715	0.9257	0.9785
122	0.3655	0.4461	0.5207	0.5908	0.6573	0.7210	0.7823	0.8416	0.8990	0.9549	1.0093
124	0.3768	0.4599	0.5368	0.6091	0.6777	0.7434	0.8066	0.8677	0.9269	0.9845	1.0407
126	0.3883	0.4740	0.5532	0.6277	0.6984	0.7661	0.8313	0.8942	0.9552	1.0146	1.0724
128	0.4000	0.4882	0.5698	0.6465	0.7194	0.7891	0.8562	0.9211	0.9839	1.0451	1.1047
130	0.4118	0.5026	0.5867	0.6657	0.7407	0.8125	0.8815	0.9483	1.0130	1.0760	1.1373
132	0.4238	0.5173	0.6037	0.6850	0.7622	0.8361	0.9072	0.9759	1.0425	1.1073	1.1704
134	0.4359	0.5321	0.6211	0.7047	0.7841	0.8601	0.9332	1.0039	1.0724	1.1390	1.2040
136	0.4483	0.5471	0.6386	0.7246	0.8062	0.8844	0.9596	1.0322	1.1027	1.1712	1.2380
138	0.4607	0.5623	0.6564	0.7447	0.8287	0.9090	0.9863	1.0609	1.1334	1.2038	1.2724
140	0.4734	0.5778	0.6743	0.7651	0.8514	0.9339	1.0133	1.0900	1.1644	1.2368	1.3073
142	0.4861	0.5934	0.6926	0.7858	0.8744	0.9591	1.0407	1.1195	1.1959	1.2702	1.3426
144	0.4991	0.6092	0.7110	0.8067	0.8977	0.9847	1.0684	1.1493	1.2277	1.3040	1.3784
146	0.5122	0.6252	0.7297	0.8279	0.9212	1.0105	1.0964	1.1795	1.2600	1.3383	1.4146
148	0.5255	0.6414	0.7486	0.8494	0.9451	1.0367	1.1248	1.2100	1.2926	1.3729	1.4512
150	0.5389	0.6577	0.7677	0.8711	0.9692	1.0632	1.1536	1.2409	1.3256	1.4080	1.4883
152	0.5525	0.6743	0.7871	0.8930	0.9937	1.0900	1.1827	1.2722	1.3590	1.4435	1.5258
154	0.5662	0.6911	0.8066	0.9152	1.0184	1.1171	1.2121	1.3039	1.3929	1.4794	1.5637
156	0.5801	0.7081	0.8264	0.9377	1.0434	1.1445	1.2418	1.3359	1.4270	1.5157	1.6021
158	0.5942	0.7252	0.8465	0.9604	1.0687	1.1723	1.2719	1.3682	1.4616	1.5524	1.6410
160	0.6084	0.7426	0.8667	0.9834	1.0942	1.2003	1.3023	1.4010	1.4966	1.5896	1.6802
162	0.6228	0.7601	0.8872	1.0066	1.1201	1.2286	1.3331	1.4341	1.5319	1.6271	1.7199
164	0.6373	0.7778	0.9079	1.0301	1.1462	1.2573	1.3642	1.4675	1.5677	1.6651	1.7600
166	0.6520	0.7958	0.9288	1.0539	1.1726	1.2863	1.3956	1.5013	1.6038	1.7035	1.8006
168	0.6668	0.8139	0.9499	1.0778	1.1993	1.3156	1.4274	1.5355	1.6403	1.7422	1.8416
170	0.6818	0.8322	0.9713	1.1021	1.2263	1.3452	1.4595	1.5700	1.6772	1.7814	1.8830
172	0.6970	0.8507	0.9929	1.1266	1.2536	1.3751	1.4920	1.6049	1.7145	1.8210	1.9248
174	0.7123	0.8694	1.0147	1.1513	1.2811	1.4053	1.5247	1.6402	1.7521	1.8610	1.9671
176	0.7277	0.8882	1.0367	1.1763	1.3089	1.4358	1.5578	1.6758	1.7902	1.9014	2.0098
178	0.7434	0.9073	1.0590	1.2016	1.3370	1.4666	1.5913	1.7118	1.8286	1.9422	2.0530
180	0.7591	0.9266	1.0815	1.2271	1.3654	1.4977	1.6250	1.7481	1.8674	1.9834	2.0965
182	0.7751	0.9460	1.1042	1.2528	1.3940	1.5291	1.6591	1.7848	1.9066	2.0251	2.1405
184	0.7912	0.9656	1.1271	1.2788	1.4230	1.5609	1.6936	1.8218	1.9462	2.0671	2.1850
186	0.8074	0.9855	1.1502	1.3051	1.4522	1.5929	1.7283	1.8592	1.9861	2.1095	2.2298
188	0.8238	1.0055	1.1736	1.3316	1.4816	1.6253	1.7634	1.8970	2.0265	2.1524	2.2751
190	0.8403	1.0257	1.1971	1.3583	1.5114	1.6579	1.7989	1.9351	2.0672	2.1956	2.3208
192	0.8570	1.0461	1.2209	1.3853	1.5415	1.6909	1.8346	1.9735	2.1082	2.2392	2.3669
194	0.8739	1.0666	1.2450	1.4126	1.5718	1.7241	1.8707	2.0123	2.1497	2.2833	2.4135
196	0.8909	1.0874	1.2692	1.4401	1.6024	1.7577	1.9071	2.0515	2.1915	2.3277	2.4604
198	0.9081	1.1083	1.2936	1.4678	1.6332	1.7915	1.9438	2.0910	2.2338	2.3726	2.5078
200	0.9254	1.1295	1.3183	1.4958	1.6644	1.8257	1.9809	2.1309	2.2764	2.4178	2.5557

Table 6: Two way total volume table under bark in cubic meter for rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
30	0.0251	0.0306	0.0356	0.0403	0.0448	0.0491	0.0532	0.0572	0.0611	0.0648	0.0685
32	0.0283	0.0345	0.0402	0.0456	0.0506	0.0555	0.0602	0.0647	0.0690	0.0733	0.0774
34	0.0318	0.0387	0.0451	0.0511	0.0568	0.0622	0.0675	0.0725	0.0774	0.0822	0.0868
36	0.0354	0.0431	0.0503	0.0570	0.0633	0.0694	0.0752	0.0808	0.0863	0.0916	0.0967
38	0.0392	0.0478	0.0557	0.0631	0.0701	0.0768	0.0833	0.0895	0.0956	0.1014	0.1071
40	0.0433	0.0527	0.0614	0.0695	0.0773	0.0847	0.0918	0.0986	0.1053	0.1118	0.1181
42	0.0474	0.0578	0.0673	0.0763	0.0847	0.0929	0.1007	0.1082	0.1155	0.1226	0.1295
44	0.0518	0.0631	0.0735	0.0833	0.0925	0.1014	0.1099	0.1181	0.1261	0.1339	0.1414
46	0.0563	0.0686	0.0799	0.0906	0.1007	0.1103	0.1196	0.1285	0.1372	0.1456	0.1538
48	0.0611	0.0744	0.0867	0.0982	0.1091	0.1196	0.1296	0.1393	0.1487	0.1578	0.1667
50	0.0660	0.0804	0.0936	0.1061	0.1179	0.1292	0.1400	0.1505	0.1606	0.1705	0.1801
52	0.0711	0.0865	0.1008	0.1142	0.1270	0.1391	0.1508	0.1621	0.1730	0.1836	0.1940
54	0.0763	0.0930	0.1083	0.1227	0.1364	0.1494	0.1620	0.1741	0.1858	0.1972	0.2084
56	0.0818	0.0996	0.1160	0.1315	0.1461	0.1601	0.1735	0.1865	0.1991	0.2113	0.2232
58	0.0874	0.1064	0.1240	0.1405	0.1561	0.1711	0.1854	0.1993	0.2128	0.2258	0.2385
60	0.0932	0.1135	0.1322	0.1498	0.1665	0.1824	0.1977	0.2125	0.2269	0.2408	0.2544
62	0.0991	0.1207	0.1407	0.1594	0.1771	0.1941	0.2104	0.2261	0.2414	0.2562	0.2706
64	0.1053	0.1282	0.1494	0.1693	0.1881	0.2061	0.2234	0.2401	0.2563	0.2721	0.2874
66	0.1116	0.1359	0.1583	0.1794	0.1994	0.2185	0.2368	0.2545	0.2717	0.2884	0.3046
68	0.1181	0.1438	0.1676	0.1898	0.2110	0.2312	0.2506	0.2693	0.2875	0.3052	0.3224
70	0.1248	0.1519	0.1770	0.2005	0.2229	0.2442	0.2647	0.2845	0.3037	0.3224	0.3405
72	0.1316	0.1602	0.1867	0.2115	0.2351	0.2576	0.2792	0.3001	0.3204	0.3400	0.3592
74	0.1386	0.1688	0.1966	0.2228	0.2476	0.2713	0.2941	0.3161	0.3374	0.3581	0.3783
76	0.1458	0.1775	0.2068	0.2343	0.2604	0.2854	0.3093	0.3325	0.3549	0.3767	0.3979
78	0.1531	0.1865	0.2172	0.2461	0.2735	0.2997	0.3249	0.3492	0.3728	0.3957	0.4180
80	0.1606	0.1956	0.2279	0.2582	0.2870	0.3145	0.3409	0.3664	0.3911	0.4151	0.4385
82	0.1683	0.2050	0.2388	0.2706	0.3007	0.3295	0.3572	0.3839	0.4098	0.4350	0.4595
84	0.1762	0.2145	0.2500	0.2832	0.3147	0.3449	0.3738	0.4018	0.4289	0.4553	0.4809
86	0.1842	0.2243	0.2614	0.2961	0.3291	0.3606	0.3909	0.4201	0.4485	0.4760	0.5028
88	0.1924	0.2343	0.2730	0.3093	0.3437	0.3766	0.4083	0.4388	0.4684	0.4972	0.5252
90	0.2008	0.2445	0.2848	0.3227	0.3587	0.3930	0.4260	0.4579	0.4888	0.5188	0.5480
92	0.2093	0.2549	0.2969	0.3364	0.3739	0.4097	0.4441	0.4773	0.5095	0.5408	0.5713
94	0.2180	0.2655	0.3093	0.3504	0.3894	0.4267	0.4626	0.4972	0.5307	0.5633	0.5950
96	0.2269	0.2762	0.3219	0.3647	0.4053	0.4441	0.4814	0.5174	0.5523	0.5862	0.6192
98	0.2359	0.2872	0.3347	0.3792	0.4214	0.4617	0.5005	0.5380	0.5743	0.6095	0.6439
100	0.2451	0.2984	0.3477	0.3940	0.4378	0.4797	0.5200	0.5589	0.5966	0.6333	0.6690
102	0.2544	0.3098	0.3610	0.4090	0.4545	0.4981	0.5399	0.5803	0.6194	0.6575	0.6945
104	0.2640	0.3214	0.3745	0.4243	0.4716	0.5167	0.5601	0.6020	0.6426	0.6821	0.7205
106	0.2737	0.3332	0.3883	0.4399	0.4889	0.5357	0.5807	0.6241	0.6662	0.7071	0.7470
108	0.2835	0.3452	0.4022	0.4557	0.5065	0.5550	0.6016	0.6466	0.6902	0.7326	0.7739
110	0.2935	0.3575	0.4165	0.4719	0.5244	0.5746	0.6229	0.6695	0.7146	0.7585	0.8012
112	0.3037	0.3699	0.4309	0.4882	0.5426	0.5945	0.6445	0.6927	0.7394	0.7848	0.8290

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
114	0.3141	0.3825	0.4456	0.5049	0.5611	0.6148	0.6664	0.7163	0.7646	0.8116	0.8573
116	0.3246	0.3953	0.4605	0.5218	0.5798	0.6354	0.6887	0.7403	0.7902	0.8387	0.8860
118	0.3353	0.4083	0.4757	0.5389	0.5989	0.6563	0.7114	0.7646	0.8162	0.8663	0.9151
120	0.3461	0.4215	0.4910	0.5563	0.6183	0.6775	0.7344	0.7893	0.8426	0.8943	0.9447
122	0.3571	0.4349	0.5066	0.5740	0.6379	0.6990	0.7577	0.8144	0.8694	0.9227	0.9747
124	0.3683	0.4484	0.5225	0.5920	0.6579	0.7209	0.7814	0.8399	0.8965	0.9516	1.0052
126	0.3796	0.4622	0.5386	0.6102	0.6781	0.7430	0.8055	0.8657	0.9241	0.9808	1.0361
128	0.3911	0.4762	0.5548	0.6286	0.6986	0.7655	0.8298	0.8919	0.9521	1.0105	1.0675
130	0.4027	0.4904	0.5714	0.6474	0.7194	0.7883	0.8545	0.9185	0.9804	1.0406	1.0993
132	0.4145	0.5048	0.5881	0.6663	0.7405	0.8114	0.8796	0.9454	1.0092	1.0711	1.1315
134	0.4265	0.5194	0.6051	0.6856	0.7619	0.8349	0.9050	0.9727	1.0383	1.1021	1.1642
136	0.4386	0.5341	0.6223	0.7051	0.7836	0.8586	0.9307	1.0004	1.0678	1.1334	1.1973
138	0.4509	0.5491	0.6398	0.7248	0.8055	0.8827	0.9568	1.0284	1.0978	1.1652	1.2308
140	0.4634	0.5643	0.6574	0.7449	0.8278	0.9070	0.9832	1.0568	1.1281	1.1973	1.2648
142	0.4760	0.5796	0.6753	0.7651	0.8503	0.9317	1.0100	1.0856	1.1588	1.2299	1.2992
144	0.4887	0.5952	0.6934	0.7857	0.8731	0.9567	1.0371	1.1147	1.1899	1.2629	1.3341
146	0.5017	0.6109	0.7118	0.8064	0.8962	0.9820	1.0645	1.1442	1.2214	1.2963	1.3694
148	0.5148	0.6269	0.7304	0.8275	0.9196	1.0077	1.0923	1.1740	1.2532	1.3302	1.4051
150	0.5280	0.6430	0.7492	0.8488	0.9433	1.0336	1.1204	1.2043	1.2855	1.3644	1.4413
152	0.5414	0.6593	0.7682	0.8703	0.9672	1.0598	1.1489	1.2348	1.3181	1.3990	1.4779
154	0.5550	0.6758	0.7874	0.8921	0.9915	1.0864	1.1777	1.2658	1.3511	1.4341	1.5149
156	0.5687	0.6925	0.8069	0.9142	1.0160	1.1133	1.2068	1.2971	1.3845	1.4696	1.5524
158	0.5826	0.7095	0.8266	0.9365	1.0408	1.1404	1.2362	1.3287	1.4183	1.5054	1.5902
160	0.5966	0.7265	0.8465	0.9591	1.0659	1.1679	1.2660	1.3607	1.4525	1.5417	1.6286
162	0.6108	0.7438	0.8666	0.9819	1.0912	1.1957	1.2961	1.3931	1.4871	1.5784	1.6673
164	0.6252	0.7613	0.8870	1.0050	1.1169	1.2238	1.3266	1.4259	1.5220	1.6155	1.7065
166	0.6397	0.7790	0.9076	1.0283	1.1428	1.2522	1.3574	1.4590	1.5574	1.6530	1.7461
168	0.6544	0.7968	0.9284	1.0519	1.1690	1.2809	1.3885	1.4924	1.5931	1.6909	1.7861
170	0.6692	0.8149	0.9494	1.0757	1.1955	1.3099	1.4200	1.5262	1.6292	1.7292	1.8266
172	0.6842	0.8331	0.9707	1.0998	1.2222	1.3393	1.4518	1.5604	1.6656	1.7679	1.8675
174	0.6993	0.8516	0.9922	1.1241	1.2493	1.3689	1.4839	1.5949	1.7025	1.8070	1.9088
176	0.7146	0.8702	1.0139	1.1487	1.2766	1.3988	1.5163	1.6298	1.7397	1.8465	1.9506
178	0.7300	0.8890	1.0358	1.1735	1.3042	1.4291	1.5491	1.6650	1.7773	1.8865	1.9927
180	0.7457	0.9080	1.0579	1.1986	1.3321	1.4596	1.5822	1.7006	1.8153	1.9268	2.0353
182	0.7614	0.9272	1.0803	1.2240	1.3602	1.4905	1.6157	1.7366	1.8537	1.9675	2.0784
184	0.7773	0.9466	1.1029	1.2496	1.3887	1.5216	1.6495	1.7729	1.8925	2.0086	2.1218
186	0.7934	0.9662	1.1257	1.2754	1.4174	1.5531	1.6836	1.8095	1.9316	2.0502	2.1657
188	0.8096	0.9859	1.1487	1.3015	1.4464	1.5849	1.7180	1.8465	1.9711	2.0921	2.2100
190	0.8260	1.0059	1.1720	1.3278	1.4756	1.6169	1.7528	1.8839	2.0110	2.1344	2.2547
192	0.8426	1.0260	1.1954	1.3544	1.5052	1.6493	1.7879	1.9216	2.0512	2.1772	2.2998
194	0.8592	1.0463	1.2191	1.3812	1.5350	1.6820	1.8233	1.9597	2.0919	2.2203	2.3454
196	0.8761	1.0669	1.2430	1.4083	1.5651	1.7150	1.8590	1.9981	2.1329	2.2638	2.3914
198	0.8931	1.0876	1.2671	1.4356	1.5955	1.7482	1.8951	2.0369	2.1743	2.3078	2.4378
200	0.9102	1.1085	1.2915	1.4632	1.6261	1.7818	1.9315	2.0760	2.2160	2.3521	2.4846

Table 7: Two way timber volume table (girth up to 50 cm top end) over bark in cubic meter for rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
50	0.0110										
52	0.0178										
54	0.0247	0.0169	0.0092	0.0015							
56	0.0315	0.0257	0.0198	0.0140	0.0081	0.0023					
58	0.0385	0.0345	0.0305	0.0265	0.0225	0.0185	0.0145	0.0105	0.0065	0.0025	
60	0.0454	0.0433	0.0411	0.0390	0.0368	0.0347	0.0325	0.0304	0.0282	0.0261	0.0239
62	0.0524	0.0522	0.0519	0.0516	0.0513	0.0510	0.0507	0.0504	0.0501	0.0498	0.0495
64	0.0595	0.0611	0.0626	0.0642	0.0657	0.0673	0.0688	0.0704	0.0719	0.0735	0.0751
66	0.0666	0.0700	0.0734	0.0769	0.0803	0.0837	0.0871	0.0905	0.0939	0.0973	0.1007
68	0.0738	0.0791	0.0843	0.0896	0.0948	0.1001	0.1053	0.1106	0.1159	0.1211	0.1264
70	0.0810	0.0881	0.0952	0.1023	0.1094	0.1166	0.1237	0.1308	0.1379	0.1450	0.1521
72	0.0883	0.0972	0.1062	0.1152	0.1241	0.1331	0.1420	0.1510	0.1599	0.1689	0.1779
74	0.0956	0.1064	0.1172	0.1280	0.1388	0.1496	0.1604	0.1713	0.1821	0.1929	0.2037
76	0.1030	0.1156	0.1283	0.1409	0.1536	0.1663	0.1789	0.1916	0.2042	0.2169	0.2296
78	0.1104	0.1249	0.1394	0.1539	0.1684	0.1829	0.1974	0.2119	0.2264	0.2410	0.2555
80	0.1178	0.1342	0.1505	0.1669	0.1833	0.1996	0.2160	0.2324	0.2487	0.2651	0.2814
82	0.1253	0.1435	0.1617	0.1800	0.1982	0.2164	0.2346	0.2528	0.2710	0.2892	0.3075
84	0.1329	0.1529	0.1730	0.1931	0.2131	0.2332	0.2533	0.2733	0.2934	0.3135	0.3335
86	0.1405	0.1624	0.1843	0.2062	0.2281	0.2500	0.2720	0.2939	0.3158	0.3377	0.3596
88	0.1481	0.1719	0.1957	0.2194	0.2432	0.2670	0.2907	0.3145	0.3383	0.3620	0.3858
90	0.1558	0.1814	0.2070	0.2327	0.2583	0.2839	0.3095	0.3351	0.3608	0.3864	0.4120
92	0.1636	0.1910	0.2185	0.2460	0.2734	0.3009	0.3284	0.3558	0.3833	0.4108	0.4382
94	0.1714	0.2007	0.2300	0.2593	0.2886	0.3180	0.3473	0.3766	0.4059	0.4352	0.4645
96	0.1792	0.2104	0.2415	0.2727	0.3039	0.3350	0.3662	0.3974	0.4286	0.4597	0.4909
98	0.1871	0.2201	0.2531	0.2861	0.3192	0.3522	0.3852	0.4182	0.4513	0.4843	0.5173
100	0.1950	0.2299	0.2648	0.2996	0.3345	0.3694	0.4043	0.4391	0.4740	0.5089	0.5437
102	0.2030	0.2397	0.2765	0.3132	0.3499	0.3866	0.4233	0.4601	0.4968	0.5335	0.5702
104	0.2110	0.2496	0.2882	0.3268	0.3653	0.4039	0.4425	0.4811	0.5196	0.5582	0.5968
106	0.2191	0.2595	0.3000	0.3404	0.3808	0.4212	0.4617	0.5021	0.5425	0.5830	0.6234
108	0.2272	0.2695	0.3118	0.3541	0.3964	0.4386	0.4809	0.5232	0.5655	0.6077	0.6500
110	0.2354	0.2796	0.3237	0.3678	0.4119	0.4561	0.5002	0.5443	0.5885	0.6326	0.6767
112	0.2437	0.2896	0.3356	0.3816	0.4276	0.4735	0.5195	0.5655	0.6115	0.6575	0.7034
114	0.2519	0.2998	0.3476	0.3954	0.4432	0.4911	0.5389	0.5867	0.6346	0.6824	0.7302
116	0.2602	0.3099	0.3596	0.4093	0.4590	0.5087	0.5583	0.6080	0.6577	0.7074	0.7571
118	0.2686	0.3201	0.3717	0.4232	0.4747	0.5263	0.5778	0.6293	0.6809	0.7324	0.7839
120	0.2770	0.3304	0.3838	0.4372	0.4906	0.5440	0.5973	0.6507	0.7041	0.7575	0.8109
122	0.2855	0.3407	0.3960	0.4512	0.5064	0.5617	0.6169	0.6721	0.7274	0.7826	0.8379
124	0.2940	0.3511	0.4082	0.4653	0.5224	0.5794	0.6365	0.6936	0.7507	0.8078	0.8649
126	0.3026	0.3615	0.4205	0.4794	0.5383	0.5973	0.6562	0.7151	0.7741	0.8330	0.8920
128	0.3112	0.3720	0.4328	0.4936	0.5543	0.6151	0.6759	0.7367	0.7975	0.8583	0.9191
130	0.3199	0.3825	0.4451	0.5078	0.5704	0.6330	0.6957	0.7583	0.8210	0.8836	0.9462

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
132	0.3286	0.3930	0.4575	0.5220	0.5865	0.6510	0.7155	0.7800	0.8445	0.9090	0.9735
134	0.3373	0.4037	0.4700	0.5363	0.6027	0.6690	0.7354	0.8017	0.8680	0.9344	1.0007
136	0.3461	0.4143	0.4825	0.5507	0.6189	0.6871	0.7553	0.8235	0.8917	0.9598	1.0280
138	0.3550	0.4250	0.4951	0.5651	0.6351	0.7052	0.7752	0.8453	0.9153	0.9854	1.0554
140	0.3639	0.4358	0.5077	0.5796	0.6514	0.7233	0.7952	0.8671	0.9390	1.0109	1.0828
142	0.3728	0.4466	0.5203	0.5941	0.6678	0.7415	0.8153	0.8890	0.9628	1.0365	1.1103
144	0.3818	0.4574	0.5330	0.6086	0.6842	0.7598	0.8354	0.9110	0.9866	1.0622	1.1378
146	0.3909	0.4683	0.5458	0.6232	0.7007	0.7781	0.8555	0.9330	1.0104	1.0879	1.1653
148	0.4000	0.4793	0.5585	0.6378	0.7171	0.7964	0.8757	0.9550	1.0343	1.1136	1.1929
150	0.4091	0.4902	0.5714	0.6525	0.7337	0.8148	0.8960	0.9771	1.0583	1.1394	1.2206
152	0.4183	0.5013	0.5843	0.6673	0.7503	0.8333	0.9163	0.9993	1.0823	1.1653	1.2483
154	0.4275	0.5124	0.5972	0.6821	0.7669	0.8518	0.9366	1.0215	1.1063	1.1912	1.2760
156	0.4368	0.5235	0.6102	0.6969	0.7836	0.8703	0.9570	1.0437	1.1304	1.2171	1.3038
158	0.4461	0.5347	0.6232	0.7118	0.8004	0.8889	0.9775	1.0660	1.1546	1.2431	1.3317
160	0.4555	0.5459	0.6363	0.7267	0.8171	0.9075	0.9980	1.0884	1.1788	1.2692	1.3596
162	0.4649	0.5572	0.6495	0.7417	0.8340	0.9262	1.0185	1.1107	1.2030	1.2953	1.3875
164	0.4744	0.5685	0.6626	0.7567	0.8509	0.9450	1.0391	1.1332	1.2273	1.3214	1.4155
166	0.4840	0.5799	0.6759	0.7718	0.8678	0.9637	1.0597	1.1557	1.2516	1.3476	1.4435
168	0.4935	0.5913	0.6891	0.7870	0.8848	0.9826	1.0804	1.1782	1.2760	1.3738	1.4716
170	0.5032	0.6028	0.7025	0.8021	0.9018	1.0015	1.1011	1.2008	1.3004	1.4001	1.4998
172	0.5128	0.6143	0.7158	0.8174	0.9189	1.0204	1.1219	1.2234	1.3249	1.4264	1.5279
174	0.5225	0.6259	0.7293	0.8326	0.9360	1.0394	1.1427	1.2461	1.3494	1.4528	1.5562
176	0.5323	0.6375	0.7427	0.8479	0.9532	1.0584	1.1636	1.2688	1.3740	1.4792	1.5844
178	0.5421	0.6492	0.7563	0.8633	0.9704	1.0774	1.1845	1.2916	1.3986	1.5057	1.6128
180	0.5520	0.6609	0.7698	0.8787	0.9876	1.0966	1.2055	1.3144	1.4233	1.5322	1.6411
182	0.5619	0.6727	0.7834	0.8942	1.0050	1.1157	1.2265	1.3373	1.4480	1.5588	1.6696
184	0.5719	0.6845	0.7971	0.9097	1.0223	1.1349	1.2476	1.3602	1.4728	1.5854	1.6980
186	0.5819	0.6963	0.8108	0.9253	1.0397	1.1542	1.2687	1.3831	1.4976	1.6121	1.7266
188	0.5919	0.7082	0.8246	0.9409	1.0572	1.1735	1.2898	1.4062	1.5225	1.6388	1.7551
190	0.6020	0.7202	0.8384	0.9565	1.0747	1.1929	1.3111	1.4292	1.5474	1.6656	1.7837
192	0.6122	0.7322	0.8522	0.9722	1.0923	1.2123	1.3323	1.4523	1.5724	1.6924	1.8124
194	0.6224	0.7442	0.8661	0.9880	1.1099	1.2317	1.3536	1.4755	1.5974	1.7192	1.8411
196	0.6326	0.7563	0.8801	1.0038	1.1275	1.2512	1.3750	1.4987	1.6224	1.7461	1.8699
198	0.6429	0.7685	0.8941	1.0196	1.1452	1.2708	1.3964	1.5220	1.6475	1.7731	1.8987
200	0.6533	0.7807	0.9081	1.0355	1.1630	1.2904	1.4178	1.5453	1.6727	1.8001	1.9275

Table 8: Two way timber volume table (girth up to 50 cm top end) under bark in cubic meter for rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
50	0.0085										
52	0.0151	0.0060									
54	0.0218	0.0145	0.0072								
56	0.0286	0.0230	0.0175	0.0120	0.0065	0.0009					
58	0.0354	0.0316	0.0279	0.0241	0.0204	0.0166	0.0129	0.0091	0.0054	0.0017	
60	0.0422	0.0402	0.0383	0.0363	0.0343	0.0324	0.0304	0.0284	0.0265	0.0245	0.0225
62	0.0491	0.0489	0.0487	0.0485	0.0483	0.0482	0.0480	0.0478	0.0476	0.0474	0.0472
64	0.0560	0.0576	0.0592	0.0608	0.0624	0.0640	0.0656	0.0672	0.0688	0.0704	0.0720
66	0.0630	0.0664	0.0698	0.0732	0.0765	0.0799	0.0833	0.0866	0.0900	0.0934	0.0967
68	0.0701	0.0752	0.0804	0.0855	0.0907	0.0958	0.1010	0.1061	0.1113	0.1164	0.1216
70	0.0772	0.0841	0.0910	0.0980	0.1049	0.1118	0.1188	0.1257	0.1326	0.1395	0.1465
72	0.0843	0.0931	0.1018	0.1105	0.1192	0.1279	0.1366	0.1453	0.1540	0.1627	0.1714
74	0.0915	0.1020	0.1125	0.1230	0.1335	0.1440	0.1545	0.1649	0.1754	0.1859	0.1964
76	0.0988	0.1111	0.1233	0.1356	0.1479	0.1601	0.1724	0.1846	0.1969	0.2092	0.2214
78	0.1061	0.1202	0.1342	0.1482	0.1623	0.1763	0.1904	0.2044	0.2184	0.2325	0.2465
80	0.1135	0.1293	0.1451	0.1609	0.1767	0.1926	0.2084	0.2242	0.2400	0.2558	0.2717
82	0.1209	0.1385	0.1561	0.1737	0.1913	0.2089	0.2265	0.2441	0.2617	0.2793	0.2969
84	0.1283	0.1477	0.1671	0.1865	0.2058	0.2252	0.2446	0.2640	0.2834	0.3027	0.3221
86	0.1358	0.1570	0.1782	0.1993	0.2205	0.2416	0.2628	0.2839	0.3051	0.3262	0.3474
88	0.1434	0.1663	0.1893	0.2122	0.2351	0.2581	0.2810	0.3039	0.3269	0.3498	0.3727
90	0.1510	0.1757	0.2004	0.2252	0.2499	0.2746	0.2993	0.3240	0.3487	0.3734	0.3981
92	0.1587	0.1852	0.2117	0.2382	0.2647	0.2911	0.3176	0.3441	0.3706	0.3971	0.4236
94	0.1664	0.1947	0.2229	0.2512	0.2795	0.3077	0.3360	0.3643	0.3926	0.4208	0.4491
96	0.1742	0.2042	0.2343	0.2643	0.2944	0.3244	0.3545	0.3845	0.4146	0.4446	0.4746
98	0.1820	0.2138	0.2456	0.2775	0.3093	0.3411	0.3729	0.4048	0.4366	0.4684	0.5003
100	0.1899	0.2235	0.2571	0.2907	0.3243	0.3579	0.3915	0.4251	0.4587	0.4923	0.5259
102	0.1978	0.2332	0.2685	0.3039	0.3393	0.3747	0.4101	0.4455	0.4808	0.5162	0.5516
104	0.2057	0.2429	0.2801	0.3172	0.3544	0.3916	0.4287	0.4659	0.5030	0.5402	0.5774
106	0.2138	0.2527	0.2917	0.3306	0.3695	0.4085	0.4474	0.4864	0.5253	0.5642	0.6032
108	0.2218	0.2626	0.3033	0.3440	0.3847	0.4254	0.4662	0.5069	0.5476	0.5883	0.6290
110	0.2300	0.2725	0.3150	0.3575	0.4000	0.4425	0.4850	0.5275	0.5700	0.6125	0.6549
112	0.2381	0.2824	0.3267	0.3710	0.4153	0.4595	0.5038	0.5481	0.5924	0.6366	0.6809
114	0.2464	0.2924	0.3385	0.3845	0.4306	0.4766	0.5227	0.5688	0.6148	0.6609	0.7069
116	0.2547	0.3025	0.3503	0.3982	0.4460	0.4938	0.5417	0.5895	0.6373	0.6852	0.7330
118	0.2630	0.3126	0.3622	0.4118	0.4614	0.5110	0.5607	0.6103	0.6599	0.7095	0.7591
120	0.2714	0.3228	0.3741	0.4255	0.4769	0.5283	0.5797	0.6311	0.6825	0.7339	0.7853
122	0.2798	0.3330	0.3861	0.4393	0.4925	0.5456	0.5988	0.6520	0.7051	0.7583	0.8115
124	0.2883	0.3432	0.3982	0.4531	0.5081	0.5630	0.6180	0.6729	0.7279	0.7828	0.8378
126	0.2968	0.3535	0.4103	0.4670	0.5237	0.5804	0.6372	0.6939	0.7506	0.8073	0.8641
128	0.3054	0.3639	0.4224	0.4809	0.5394	0.5979	0.6564	0.7149	0.7734	0.8319	0.8904
130	0.3140	0.3743	0.4346	0.4949	0.5552	0.6155	0.6757	0.7360	0.7963	0.8566	0.9169

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
132	0.3227	0.3848	0.4468	0.5089	0.5710	0.6330	0.6951	0.7572	0.8192	0.8813	0.9433
134	0.3315	0.3953	0.4591	0.5230	0.5868	0.6507	0.7145	0.7783	0.8422	0.9060	0.9699
136	0.3403	0.4059	0.4715	0.5371	0.6027	0.6683	0.7340	0.7996	0.8652	0.9308	0.9964
138	0.3491	0.4165	0.4839	0.5513	0.6187	0.6861	0.7535	0.8209	0.8883	0.9557	1.0231
140	0.3580	0.4272	0.4963	0.5655	0.6347	0.7039	0.7730	0.8422	0.9114	0.9806	1.0497
142	0.3669	0.4379	0.5088	0.5798	0.6508	0.7217	0.7927	0.8636	0.9346	1.0055	1.0765
144	0.3759	0.4487	0.5214	0.5941	0.6669	0.7396	0.8123	0.8851	0.9578	1.0305	1.1033
146	0.3850	0.4595	0.5340	0.6085	0.6830	0.7575	0.8320	0.9066	0.9811	1.0556	1.1301
148	0.3941	0.4704	0.5467	0.6229	0.6992	0.7755	0.8518	0.9281	1.0044	1.0807	1.1570
150	0.4032	0.4813	0.5594	0.6374	0.7155	0.7936	0.8716	0.9497	1.0278	1.1058	1.1839
152	0.4124	0.4923	0.5721	0.6520	0.7318	0.8117	0.8915	0.9714	1.0512	1.1310	1.2109
154	0.4217	0.5033	0.5849	0.6666	0.7482	0.8298	0.9114	0.9931	1.0747	1.1563	1.2379
156	0.4310	0.5144	0.5978	0.6812	0.7646	0.8480	0.9314	1.0148	1.0982	1.1816	1.2650
158	0.4403	0.5255	0.6107	0.6959	0.7811	0.8662	0.9514	1.0366	1.1218	1.2070	1.2922
160	0.4497	0.5367	0.6237	0.7106	0.7976	0.8845	0.9715	1.0585	1.1454	1.2324	1.3193
162	0.4592	0.5479	0.6367	0.7254	0.8142	0.9029	0.9916	1.0804	1.1691	1.2578	1.3466
164	0.4687	0.5592	0.6497	0.7403	0.8308	0.9213	1.0118	1.1023	1.1928	1.2834	1.3739
166	0.4783	0.5706	0.6629	0.7551	0.8474	0.9397	1.0320	1.1243	1.2166	1.3089	1.4012
168	0.4879	0.5819	0.6760	0.7701	0.8642	0.9582	1.0523	1.1464	1.2405	1.3345	1.4286
170	0.4975	0.5934	0.6892	0.7851	0.8809	0.9768	1.0726	1.1685	1.2644	1.3602	1.4561
172	0.5072	0.6049	0.7025	0.8001	0.8978	0.9954	1.0930	1.1907	1.2883	1.3859	1.4836
174	0.5170	0.6164	0.7158	0.8152	0.9146	1.0141	1.1135	1.2129	1.3123	1.4117	1.5111
176	0.5268	0.6280	0.7292	0.8304	0.9316	1.0328	1.1340	1.2351	1.3363	1.4375	1.5387
178	0.5367	0.6397	0.7426	0.8456	0.9486	1.0515	1.1545	1.2575	1.3604	1.4634	1.5664
180	0.5466	0.6513	0.7561	0.8608	0.9656	1.0703	1.1751	1.2798	1.3846	1.4893	1.5941
182	0.5566	0.6631	0.7696	0.8761	0.9827	1.0892	1.1957	1.3022	1.4088	1.5153	1.6218
184	0.5666	0.6749	0.7832	0.8915	0.9998	1.1081	1.2164	1.3247	1.4330	1.5413	1.6496
186	0.5767	0.6867	0.7968	0.9069	1.0170	1.1271	1.2371	1.3472	1.4573	1.5674	1.6775
188	0.5868	0.6986	0.8105	0.9224	1.0342	1.1461	1.2579	1.3698	1.4817	1.5935	1.7054
190	0.5970	0.7106	0.8242	0.9379	1.0515	1.1651	1.2788	1.3924	1.5061	1.6197	1.7333
192	0.6072	0.7226	0.8380	0.9534	1.0688	1.1843	1.2997	1.4151	1.5305	1.6459	1.7613
194	0.6175	0.7346	0.8518	0.9690	1.0862	1.2034	1.3206	1.4378	1.5550	1.6722	1.7894
196	0.6278	0.7468	0.8657	0.9847	1.1037	1.2226	1.3416	1.4606	1.5796	1.6985	1.8175
198	0.6382	0.7589	0.8797	1.0004	1.1212	1.2419	1.3627	1.4834	1.6042	1.7249	1.8457
200	0.6486	0.7711	0.8936	1.0162	1.1387	1.2612	1.3838	1.5063	1.6288	1.7514	1.8739

Table 9: Two way total volume table over bark in cubic meter for seedling origin rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
30	0.0258	0.0314	0.0365	0.0413	0.0459	0.0502	0.0544	0.0584	0.0623	0.0661	0.0698
32	0.0292	0.0355	0.0413	0.0467	0.0519	0.0568	0.0615	0.0661	0.0705	0.0748	0.0790
34	0.0327	0.0398	0.0463	0.0524	0.0582	0.0637	0.0690	0.0742	0.0791	0.0840	0.0886
36	0.0365	0.0444	0.0516	0.0584	0.0649	0.0711	0.0770	0.0827	0.0882	0.0936	0.0988
38	0.0405	0.0492	0.0572	0.0648	0.0719	0.0788	0.0853	0.0917	0.0978	0.1038	0.1096
40	0.0446	0.0542	0.0631	0.0714	0.0793	0.0869	0.0941	0.1011	0.1078	0.1144	0.1208
42	0.0489	0.0595	0.0693	0.0784	0.0871	0.0953	0.1033	0.1109	0.1184	0.1256	0.1326
44	0.0535	0.0650	0.0757	0.0857	0.0951	0.1042	0.1128	0.1212	0.1293	0.1372	0.1449
46	0.0582	0.0708	0.0824	0.0932	0.1035	0.1134	0.1228	0.1319	0.1408	0.1493	0.1577
48	0.0631	0.0768	0.0893	0.1011	0.1123	0.1229	0.1332	0.1431	0.1526	0.1619	0.1710
50	0.0682	0.0830	0.0965	0.1093	0.1214	0.1329	0.1440	0.1546	0.1650	0.1750	0.1848
52	0.0735	0.0894	0.1040	0.1178	0.1308	0.1432	0.1551	0.1666	0.1778	0.1886	0.1992
54	0.0790	0.0961	0.1118	0.1265	0.1405	0.1539	0.1667	0.1791	0.1910	0.2027	0.2140
56	0.0847	0.1030	0.1198	0.1356	0.1506	0.1649	0.1786	0.1919	0.2047	0.2172	0.2294
58	0.0905	0.1101	0.1281	0.1450	0.1610	0.1763	0.1910	0.2052	0.2189	0.2322	0.2452
60	0.0966	0.1174	0.1366	0.1547	0.1717	0.1881	0.2037	0.2189	0.2335	0.2477	0.2616
62	0.1028	0.1250	0.1455	0.1646	0.1828	0.2002	0.2169	0.2330	0.2485	0.2637	0.2784
64	0.1092	0.1328	0.1545	0.1749	0.1942	0.2127	0.2304	0.2475	0.2640	0.2801	0.2958
66	0.1158	0.1408	0.1638	0.1855	0.2059	0.2255	0.2443	0.2624	0.2800	0.2970	0.3136
68	0.1226	0.1490	0.1734	0.1963	0.2180	0.2387	0.2586	0.2778	0.2964	0.3144	0.3320
70	0.1295	0.1575	0.1833	0.2075	0.2304	0.2523	0.2733	0.2936	0.3132	0.3323	0.3508
72	0.1367	0.1662	0.1934	0.2189	0.2431	0.2662	0.2883	0.3097	0.3305	0.3506	0.3702
74	0.1440	0.1751	0.2038	0.2306	0.2561	0.2804	0.3038	0.3263	0.3482	0.3694	0.3900
76	0.1515	0.1842	0.2144	0.2426	0.2694	0.2950	0.3196	0.3433	0.3663	0.3886	0.4104
78	0.1592	0.1936	0.2252	0.2550	0.2831	0.3100	0.3358	0.3608	0.3849	0.4083	0.4312
80	0.1670	0.2031	0.2364	0.2676	0.2971	0.3253	0.3524	0.3786	0.4039	0.4285	0.4525
82	0.1751	0.2129	0.2478	0.2804	0.3114	0.3410	0.3694	0.3968	0.4234	0.4492	0.4743
84	0.1833	0.2229	0.2594	0.2936	0.3260	0.3570	0.3868	0.4155	0.4433	0.4703	0.4966
86	0.1917	0.2331	0.2713	0.3071	0.3410	0.3734	0.4045	0.4345	0.4636	0.4918	0.5193
88	0.2003	0.2436	0.2834	0.3208	0.3563	0.3901	0.4226	0.4540	0.4843	0.5138	0.5426
90	0.2091	0.2542	0.2958	0.3349	0.3718	0.4072	0.4411	0.4738	0.5055	0.5363	0.5663
92	0.2180	0.2651	0.3085	0.3492	0.3877	0.4246	0.4599	0.4941	0.5271	0.5593	0.5905
94	0.2271	0.2762	0.3214	0.3638	0.4040	0.4423	0.4792	0.5147	0.5492	0.5826	0.6152
96	0.2364	0.2875	0.3345	0.3787	0.4205	0.4604	0.4988	0.5358	0.5717	0.6065	0.6404
98	0.2459	0.2990	0.3479	0.3938	0.4373	0.4789	0.5188	0.5573	0.5946	0.6308	0.6660
100	0.2555	0.3107	0.3616	0.4093	0.4545	0.4977	0.5391	0.5791	0.6179	0.6555	0.6922
102	0.2654	0.3227	0.3755	0.4250	0.4720	0.5168	0.5599	0.6014	0.6417	0.6807	0.7188
104	0.2754	0.3348	0.3896	0.4410	0.4897	0.5363	0.5810	0.6241	0.6658	0.7064	0.7459
106	0.2855	0.3472	0.4040	0.4573	0.5078	0.5561	0.6024	0.6471	0.6904	0.7325	0.7734
108	0.2959	0.3598	0.4187	0.4739	0.5263	0.5762	0.6243	0.6706	0.7155	0.7590	0.8015
110	0.3064	0.3726	0.4336	0.4908	0.5450	0.5967	0.6465	0.6945	0.7409	0.7861	0.8300
112	0.3171	0.3856	0.4487	0.5079	0.5640	0.6176	0.6690	0.7187	0.7668	0.8135	0.8590

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
114	0.3280	0.3988	0.4641	0.5253	0.5834	0.6388	0.6920	0.7434	0.7931	0.8414	0.8884
116	0.3390	0.4123	0.4798	0.5430	0.6030	0.6603	0.7153	0.7684	0.8198	0.8697	0.9184
118	0.3503	0.4259	0.4956	0.5610	0.6230	0.6821	0.7390	0.7938	0.8469	0.8985	0.9488
120	0.3617	0.4398	0.5118	0.5793	0.6432	0.7043	0.7630	0.8197	0.8745	0.9278	0.9796
122	0.3732	0.4538	0.5281	0.5978	0.6638	0.7269	0.7874	0.8459	0.9025	0.9574	1.0110
124	0.3850	0.4681	0.5447	0.6166	0.6847	0.7497	0.8122	0.8725	0.9309	0.9876	1.0428
126	0.3969	0.4826	0.5616	0.6357	0.7059	0.7729	0.8373	0.8995	0.9597	1.0181	1.0751
128	0.4090	0.4973	0.5787	0.6550	0.7274	0.7965	0.8628	0.9269	0.9889	1.0491	1.1078
130	0.4212	0.5122	0.5961	0.6747	0.7492	0.8204	0.8887	0.9547	1.0186	1.0806	1.1410
132	0.4337	0.5273	0.6136	0.6946	0.7713	0.8446	0.9149	0.9828	1.0486	1.1125	1.1747
134	0.4463	0.5426	0.6315	0.7148	0.7937	0.8691	0.9415	1.0114	1.0791	1.1448	1.2088
136	0.4591	0.5582	0.6496	0.7352	0.8164	0.8940	0.9685	1.0404	1.1100	1.1776	1.2434
138	0.4720	0.5739	0.6679	0.7560	0.8395	0.9192	0.9958	1.0697	1.1413	1.2108	1.2785
140	0.4851	0.5899	0.6864	0.7770	0.8628	0.9447	1.0235	1.0994	1.1730	1.2444	1.3140
142	0.4984	0.6060	0.7052	0.7983	0.8864	0.9706	1.0515	1.1295	1.2051	1.2785	1.3500
144	0.5119	0.6224	0.7243	0.8198	0.9104	0.9968	1.0799	1.1600	1.2377	1.3131	1.3865
146	0.5255	0.6389	0.7436	0.8416	0.9346	1.0234	1.1086	1.1909	1.2706	1.3480	1.4234
148	0.5393	0.6557	0.7631	0.8637	0.9591	1.0502	1.1378	1.2222	1.3040	1.3834	1.4608
150	0.5533	0.6727	0.7829	0.8861	0.9840	1.0774	1.1672	1.2539	1.3378	1.4192	1.4986
152	0.5674	0.6899	0.8029	0.9088	1.0091	1.1050	1.1971	1.2859	1.3719	1.4555	1.5369
154	0.5817	0.7073	0.8231	0.9317	1.0346	1.1328	1.2272	1.3183	1.4065	1.4922	1.5756
156	0.5962	0.7249	0.8436	0.9549	1.0603	1.1610	1.2578	1.3511	1.4415	1.5294	1.6148
158	0.6108	0.7427	0.8643	0.9783	1.0864	1.1896	1.2887	1.3843	1.4770	1.5669	1.6545
160	0.6256	0.7607	0.8853	1.0020	1.1127	1.2184	1.3199	1.4179	1.5128	1.6049	1.6946
162	0.6406	0.7789	0.9065	1.0260	1.1394	1.2476	1.3515	1.4519	1.5490	1.6434	1.7352
164	0.6558	0.7974	0.9279	1.0503	1.1663	1.2771	1.3835	1.4862	1.5856	1.6822	1.7763
166	0.6711	0.8160	0.9496	1.0748	1.1936	1.3069	1.4158	1.5209	1.6227	1.7215	1.8178
168	0.6866	0.8348	0.9715	1.0997	1.2211	1.3371	1.4485	1.5560	1.6601	1.7613	1.8597
170	0.7022	0.8539	0.9937	1.1247	1.2489	1.3676	1.4815	1.5915	1.6980	1.8014	1.9021
172	0.7181	0.8731	1.0161	1.1501	1.2771	1.3984	1.5149	1.6274	1.7362	1.8420	1.9450
174	0.7340	0.8925	1.0387	1.1757	1.3055	1.4295	1.5486	1.6636	1.7749	1.8830	1.9883
176	0.7502	0.9122	1.0615	1.2016	1.3343	1.4610	1.5827	1.7002	1.8140	1.9245	2.0320
178	0.7665	0.9320	1.0846	1.2277	1.3633	1.4928	1.6172	1.7372	1.8534	1.9663	2.0763
180	0.7830	0.9521	1.1080	1.2541	1.3926	1.5249	1.6520	1.7746	1.8933	2.0086	2.1209
182	0.7997	0.9723	1.1315	1.2808	1.4222	1.5573	1.6871	1.8123	1.9336	2.0514	2.1660
184	0.8165	0.9928	1.1553	1.3077	1.4522	1.5901	1.7226	1.8505	1.9743	2.0945	2.2116
186	0.8335	1.0134	1.1794	1.3350	1.4824	1.6232	1.7584	1.8890	2.0154	2.1381	2.2576
188	0.8506	1.0343	1.2037	1.3624	1.5129	1.6566	1.7946	1.9278	2.0568	2.1821	2.3041
190	0.8680	1.0554	1.2282	1.3902	1.5437	1.6903	1.8312	1.9671	2.0987	2.2266	2.3510
192	0.8855	1.0766	1.2529	1.4182	1.5748	1.7244	1.8681	2.0067	2.1410	2.2714	2.3984
194	0.9031	1.0981	1.2779	1.4465	1.6062	1.7588	1.9053	2.0468	2.1837	2.3167	2.4462
196	0.9209	1.1198	1.3031	1.4750	1.6379	1.7935	1.9429	2.0871	2.2268	2.3624	2.4945
198	0.9389	1.1416	1.3286	1.5038	1.6699	1.8285	1.9809	2.1279	2.2703	2.4086	2.5432
200	0.9571	1.1637	1.3543	1.5329	1.7022	1.8638	2.0192	2.1690	2.3142	2.4551	2.5924

Table 10: Two way total volume table under bark in cubic meter for seedling origin rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
30	0.0247	0.0299	0.0348	0.0393	0.0436	0.0477	0.0516	0.0554	0.0590	0.0626	0.0660
32	0.0279	0.0339	0.0394	0.0445	0.0493	0.0539	0.0584	0.0627	0.0668	0.0708	0.0747
34	0.0314	0.0381	0.0442	0.0500	0.0554	0.0606	0.0656	0.0704	0.0750	0.0796	0.0839
36	0.0350	0.0425	0.0493	0.0558	0.0618	0.0676	0.0732	0.0786	0.0838	0.0888	0.0937
38	0.0389	0.0471	0.0547	0.0619	0.0686	0.0750	0.0812	0.0872	0.0929	0.0985	0.1039
40	0.0429	0.0520	0.0604	0.0683	0.0757	0.0828	0.0896	0.0962	0.1025	0.1087	0.1147
42	0.0471	0.0571	0.0663	0.0750	0.0831	0.0909	0.0984	0.1056	0.1126	0.1194	0.1260
44	0.0515	0.0625	0.0725	0.0820	0.0909	0.0994	0.1076	0.1155	0.1231	0.1305	0.1377
46	0.0561	0.0680	0.0790	0.0893	0.0990	0.1083	0.1172	0.1258	0.1341	0.1422	0.1500
48	0.0609	0.0738	0.0857	0.0969	0.1074	0.1175	0.1272	0.1365	0.1455	0.1543	0.1628
50	0.0658	0.0798	0.0927	0.1048	0.1162	0.1271	0.1376	0.1476	0.1574	0.1668	0.1760
52	0.0710	0.0861	0.1000	0.1130	0.1253	0.1370	0.1483	0.1592	0.1697	0.1799	0.1898
54	0.0763	0.0925	0.1075	0.1215	0.1347	0.1473	0.1595	0.1711	0.1824	0.1934	0.2041
56	0.0818	0.0992	0.1153	0.1303	0.1445	0.1580	0.1710	0.1835	0.1956	0.2074	0.2188
58	0.0875	0.1062	0.1233	0.1393	0.1545	0.1690	0.1829	0.1963	0.2093	0.2218	0.2341
60	0.0934	0.1133	0.1316	0.1487	0.1649	0.1804	0.1952	0.2095	0.2233	0.2368	0.2498
62	0.0995	0.1207	0.1401	0.1584	0.1756	0.1921	0.2079	0.2231	0.2379	0.2522	0.2661
64	0.1057	0.1282	0.1490	0.1683	0.1867	0.2042	0.2210	0.2371	0.2528	0.2680	0.2828
66	0.1122	0.1361	0.1580	0.1786	0.1980	0.2166	0.2344	0.2516	0.2682	0.2843	0.3000
68	0.1188	0.1441	0.1673	0.1891	0.2097	0.2294	0.2482	0.2664	0.2840	0.3011	0.3177
70	0.1256	0.1523	0.1769	0.1999	0.2217	0.2425	0.2625	0.2817	0.3003	0.3183	0.3359
72	0.1326	0.1608	0.1868	0.2111	0.2341	0.2560	0.2770	0.2973	0.3170	0.3360	0.3546
74	0.1397	0.1695	0.1968	0.2225	0.2467	0.2698	0.2920	0.3134	0.3341	0.3542	0.3737
76	0.1471	0.1784	0.2072	0.2341	0.2597	0.2840	0.3073	0.3299	0.3516	0.3728	0.3933
78	0.1546	0.1875	0.2178	0.2461	0.2729	0.2985	0.3231	0.3467	0.3696	0.3918	0.4135
80	0.1623	0.1968	0.2286	0.2584	0.2865	0.3134	0.3392	0.3640	0.3880	0.4114	0.4340
82	0.1702	0.2064	0.2397	0.2709	0.3004	0.3286	0.3556	0.3817	0.4069	0.4313	0.4551
84	0.1782	0.2162	0.2511	0.2838	0.3147	0.3442	0.3725	0.3997	0.4261	0.4518	0.4767
86	0.1865	0.2262	0.2627	0.2969	0.3292	0.3601	0.3897	0.4182	0.4458	0.4726	0.4987
88	0.1949	0.2364	0.2746	0.3103	0.3441	0.3763	0.4073	0.4371	0.4660	0.4940	0.5212
90	0.2035	0.2468	0.2867	0.3240	0.3593	0.3929	0.4252	0.4564	0.4865	0.5157	0.5442
92	0.2123	0.2574	0.2990	0.3379	0.3747	0.4099	0.4436	0.4760	0.5075	0.5380	0.5677
94	0.2212	0.2683	0.3116	0.3522	0.3905	0.4271	0.4623	0.4961	0.5289	0.5607	0.5916
96	0.2303	0.2794	0.3245	0.3667	0.4066	0.4448	0.4813	0.5166	0.5507	0.5838	0.6160
98	0.2396	0.2906	0.3376	0.3815	0.4231	0.4627	0.5008	0.5374	0.5729	0.6074	0.6409
100	0.2491	0.3021	0.3509	0.3966	0.4398	0.4810	0.5206	0.5587	0.5956	0.6314	0.6662
102	0.2588	0.3139	0.3645	0.4120	0.4568	0.4997	0.5407	0.5804	0.6187	0.6559	0.6920
104	0.2686	0.3258	0.3784	0.4276	0.4742	0.5186	0.5613	0.6024	0.6422	0.6808	0.7183
106	0.2786	0.3379	0.3925	0.4435	0.4919	0.5380	0.5822	0.6248	0.6661	0.7061	0.7451
108	0.2888	0.3503	0.4068	0.4598	0.5098	0.5576	0.6035	0.6477	0.6904	0.7319	0.7723
110	0.2991	0.3628	0.4214	0.4762	0.5281	0.5776	0.6251	0.6709	0.7152	0.7582	0.8000
112	0.3097	0.3756	0.4362	0.4930	0.5467	0.5980	0.6471	0.6945	0.7404	0.7849	0.8282

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
114	0.3204	0.3886	0.4513	0.5100	0.5656	0.6186	0.6695	0.7185	0.7660	0.8120	0.8568
116	0.3313	0.4018	0.4666	0.5274	0.5848	0.6396	0.6922	0.7429	0.7920	0.8396	0.8859
118	0.3423	0.4152	0.4822	0.5450	0.6043	0.6610	0.7153	0.7677	0.8184	0.8676	0.9155
120	0.3535	0.4288	0.4980	0.5628	0.6242	0.6827	0.7388	0.7929	0.8452	0.8961	0.9455
122	0.3649	0.4426	0.5141	0.5810	0.6443	0.7047	0.7626	0.8185	0.8725	0.9250	0.9760
124	0.3765	0.4567	0.5304	0.5994	0.6647	0.7270	0.7868	0.8444	0.9002	0.9543	1.0069
126	0.3883	0.4709	0.5470	0.6181	0.6855	0.7497	0.8113	0.8708	0.9283	0.9841	1.0383
128	0.4002	0.4854	0.5637	0.6371	0.7065	0.7727	0.8363	0.8975	0.9568	1.0143	1.0702
130	0.4123	0.5000	0.5808	0.6563	0.7279	0.7961	0.8615	0.9246	0.9857	1.0449	1.1026
132	0.4245	0.5149	0.5981	0.6759	0.7495	0.8197	0.8872	0.9521	1.0150	1.0760	1.1354
134	0.4370	0.5300	0.6156	0.6957	0.7715	0.8438	0.9131	0.9800	1.0447	1.1075	1.1686
136	0.4496	0.5453	0.6333	0.7157	0.7937	0.8681	0.9395	1.0083	1.0749	1.1395	1.2024
138	0.4624	0.5608	0.6513	0.7361	0.8163	0.8928	0.9662	1.0370	1.1054	1.1719	1.2365
140	0.4753	0.5765	0.6696	0.7567	0.8392	0.9178	0.9933	1.0660	1.1364	1.2047	1.2712
142	0.4884	0.5924	0.6881	0.7776	0.8623	0.9431	1.0207	1.0954	1.1678	1.2380	1.3063
144	0.5017	0.6085	0.7068	0.7988	0.8858	0.9688	1.0485	1.1253	1.1996	1.2717	1.3418
146	0.5152	0.6249	0.7258	0.8202	0.9096	0.9948	1.0766	1.1555	1.2318	1.3058	1.3778
148	0.5288	0.6414	0.7450	0.8419	0.9336	1.0211	1.1051	1.1860	1.2644	1.3404	1.4143
150	0.5426	0.6582	0.7644	0.8639	0.9580	1.0478	1.1340	1.2170	1.2974	1.3754	1.4512
152	0.5566	0.6751	0.7841	0.8862	0.9827	1.0748	1.1632	1.2484	1.3308	1.4108	1.4886
154	0.5708	0.6923	0.8041	0.9087	1.0077	1.1021	1.1927	1.2801	1.3646	1.4466	1.5265
156	0.5851	0.7096	0.8242	0.9315	1.0330	1.1298	1.2227	1.3122	1.3988	1.4829	1.5647
158	0.5996	0.7272	0.8446	0.9545	1.0585	1.1577	1.2529	1.3447	1.4335	1.5197	1.6035
160	0.6142	0.7450	0.8653	0.9779	1.0844	1.1860	1.2836	1.3776	1.4685	1.5568	1.6427
162	0.6291	0.7630	0.8862	1.0015	1.1106	1.2147	1.3145	1.4108	1.5040	1.5944	1.6823
164	0.6440	0.7812	0.9073	1.0253	1.1371	1.2436	1.3459	1.4445	1.5398	1.6324	1.7225
166	0.6592	0.7995	0.9287	1.0495	1.1638	1.2729	1.3776	1.4785	1.5761	1.6708	1.7630
168	0.6745	0.8181	0.9503	1.0739	1.1909	1.3025	1.4096	1.5129	1.6128	1.7097	1.8040
170	0.6901	0.8370	0.9721	1.0986	1.2183	1.3325	1.4420	1.5476	1.6498	1.7490	1.8455
172	0.7057	0.8560	0.9942	1.1235	1.2460	1.3627	1.4748	1.5828	1.6873	1.7887	1.8874
174	0.7216	0.8752	1.0165	1.1488	1.2739	1.3933	1.5079	1.6183	1.7252	1.8289	1.9298
176	0.7376	0.8946	1.0391	1.1742	1.3022	1.4242	1.5413	1.6542	1.7634	1.8695	1.9726
178	0.7538	0.9142	1.0618	1.2000	1.3307	1.4555	1.5751	1.6905	1.8021	1.9105	2.0158
180	0.7701	0.9340	1.0849	1.2260	1.3596	1.4870	1.6093	1.7272	1.8412	1.9519	2.0596
182	0.7866	0.9541	1.1081	1.2523	1.3888	1.5189	1.6438	1.7642	1.8807	1.9937	2.1037
184	0.8033	0.9743	1.1316	1.2789	1.4182	1.5511	1.6787	1.8016	1.9206	2.0360	2.1483
186	0.8201	0.9947	1.1554	1.3057	1.4480	1.5837	1.7139	1.8394	1.9609	2.0787	2.1934
188	0.8372	1.0154	1.1793	1.3328	1.4780	1.6165	1.7494	1.8776	2.0015	2.1219	2.2389
190	0.8543	1.0362	1.2036	1.3602	1.5083	1.6497	1.7853	1.9161	2.0426	2.1654	2.2849
192	0.8717	1.0573	1.2280	1.3878	1.5390	1.6832	1.8216	1.9550	2.0841	2.2094	2.3313
194	0.8892	1.0785	1.2527	1.4157	1.5699	1.7170	1.8582	1.9943	2.1260	2.2538	2.3781
196	0.9069	1.1000	1.2776	1.4438	1.6011	1.7512	1.8952	2.0340	2.1683	2.2986	2.4254
198	0.9248	1.1216	1.3027	1.4722	1.6326	1.7857	1.9325	2.0740	2.2110	2.3439	2.4732
200	0.9428	1.1435	1.3281	1.5009	1.6645	1.8205	1.9701	2.1144	2.2540	2.3895	2.5214

Table 11: Two way timber volume table (girth up to 50 cm top end) over bark in cubic meter for seedling origin rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
50	0.0655	0.0412	0.0169								
52	0.0708	0.0489	0.0270	0.0050							
54	0.0762	0.0566	0.0370	0.0174							
56	0.0815	0.0643	0.0470	0.0297	0.0125						
58	0.0869	0.0720	0.0570	0.0421	0.0272	0.0122					
60	0.0922	0.0796	0.0670	0.0545	0.0419	0.0293	0.0167	0.0041			
62	0.0976	0.0873	0.0771	0.0668	0.0566	0.0463	0.0360	0.0258	0.0155	0.0053	
64	0.1029	0.0950	0.0871	0.0792	0.0712	0.0633	0.0554	0.0475	0.0396	0.0316	0.0237
66	0.1083	0.1027	0.0971	0.0915	0.0859	0.0803	0.0748	0.0692	0.0636	0.0580	0.0524
68	0.1136	0.1104	0.1071	0.1039	0.1006	0.0974	0.0941	0.0909	0.0876	0.0844	0.0811
70	0.1190	0.1181	0.1172	0.1162	0.1153	0.1144	0.1135	0.1126	0.1116	0.1107	0.1098
72	0.1244	0.1258	0.1272	0.1286	0.1300	0.1314	0.1328	0.1343	0.1357	0.1371	0.1385
74	0.1297	0.1335	0.1372	0.1410	0.1447	0.1484	0.1522	0.1559	0.1597	0.1634	0.1672
76	0.1351	0.1411	0.1472	0.1533	0.1594	0.1655	0.1716	0.1776	0.1837	0.1898	0.1959
78	0.1404	0.1488	0.1572	0.1657	0.1741	0.1825	0.1909	0.1993	0.2078	0.2162	0.2246
80	0.1458	0.1565	0.1673	0.1780	0.1888	0.1995	0.2103	0.2210	0.2318	0.2425	0.2533
82	0.1511	0.1642	0.1773	0.1904	0.2035	0.2165	0.2296	0.2427	0.2558	0.2689	0.2820
84	0.1565	0.1719	0.1873	0.2027	0.2182	0.2336	0.2490	0.2644	0.2798	0.2953	0.3107
86	0.1618	0.1796	0.1973	0.2151	0.2328	0.2506	0.2684	0.2861	0.3039	0.3216	0.3394
88	0.1672	0.1873	0.2074	0.2274	0.2475	0.2676	0.2877	0.3078	0.3279	0.3480	0.3681
90	0.1725	0.1950	0.2174	0.2398	0.2622	0.2846	0.3071	0.3295	0.3519	0.3743	0.3968
92	0.1779	0.2026	0.2274	0.2522	0.2769	0.3017	0.3264	0.3512	0.3759	0.4007	0.4255
94	0.1832	0.2103	0.2374	0.2645	0.2916	0.3187	0.3458	0.3729	0.4000	0.4271	0.4542
96	0.1886	0.2180	0.2474	0.2769	0.3063	0.3357	0.3651	0.3946	0.4240	0.4534	0.4829
98	0.1939	0.2257	0.2575	0.2892	0.3210	0.3527	0.3845	0.4163	0.4480	0.4798	0.5116
100	0.1993	0.2334	0.2675	0.3016	0.3357	0.3698	0.4039	0.4380	0.4721	0.5062	0.5403
102	0.2046	0.2411	0.2775	0.3139	0.3504	0.3868	0.4232	0.4597	0.4961	0.5325	0.5689
104	0.2100	0.2488	0.2875	0.3263	0.3651	0.4038	0.4426	0.4814	0.5201	0.5589	0.5976
106	0.2154	0.2565	0.2976	0.3386	0.3797	0.4208	0.4619	0.5030	0.5441	0.5852	0.6263
108	0.2207	0.2641	0.3076	0.3510	0.3944	0.4379	0.4813	0.5247	0.5682	0.6116	0.6550
110	0.2261	0.2718	0.3176	0.3634	0.4091	0.4549	0.5007	0.5464	0.5922	0.6380	0.6837
112	0.2314	0.2795	0.3276	0.3757	0.4238	0.4719	0.5200	0.5681	0.6162	0.6643	0.7124
114	0.2368	0.2872	0.3376	0.3881	0.4385	0.4889	0.5394	0.5898	0.6403	0.6907	0.7411
116	0.2421	0.2949	0.3477	0.4004	0.4532	0.5060	0.5587	0.6115	0.6643	0.7171	0.7698
118	0.2475	0.3026	0.3577	0.4128	0.4679	0.5230	0.5781	0.6332	0.6883	0.7434	0.7985
120	0.2528	0.3103	0.3677	0.4251	0.4826	0.5400	0.5975	0.6549	0.7123	0.7698	0.8272
122	0.2582	0.3180	0.3777	0.4375	0.4973	0.5570	0.6168	0.6766	0.7364	0.7961	0.8559
124	0.2635	0.3256	0.3877	0.4499	0.5120	0.5741	0.6362	0.6983	0.7604	0.8225	0.8846
126	0.2689	0.3333	0.3978	0.4622	0.5267	0.5911	0.6555	0.7200	0.7844	0.8489	0.9133
128	0.2742	0.3410	0.4078	0.4746	0.5413	0.6081	0.6749	0.7417	0.8085	0.8752	0.9420
130	0.2796	0.3487	0.4178	0.4869	0.5560	0.6251	0.6943	0.7634	0.8325	0.9016	0.9707

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
132	0.2849	0.3564	0.4278	0.4993	0.5707	0.6422	0.7136	0.7851	0.8565	0.9280	0.9994
134	0.2903	0.3641	0.4379	0.5116	0.5854	0.6592	0.7330	0.8068	0.8805	0.9543	1.0281
136	0.2956	0.3718	0.4479	0.5240	0.6001	0.6762	0.7523	0.8285	0.9046	0.9807	1.0568
138	0.3010	0.3795	0.4579	0.5363	0.6148	0.6932	0.7717	0.8501	0.9286	1.0070	1.0855
140	0.3064	0.3871	0.4679	0.5487	0.6295	0.7103	0.7911	0.8718	0.9526	1.0334	1.1142
142	0.3117	0.3948	0.4779	0.5611	0.6442	0.7273	0.8104	0.8935	0.9766	1.0598	1.1429
144	0.3171	0.4025	0.4880	0.5734	0.6589	0.7443	0.8298	0.9152	1.0007	1.0861	1.1716
146	0.3224	0.4102	0.4980	0.5858	0.6736	0.7613	0.8491	0.9369	1.0247	1.1125	1.2003
148	0.3278	0.4179	0.5080	0.5981	0.6882	0.7784	0.8685	0.9586	1.0487	1.1389	1.2290
150	0.3331	0.4256	0.5180	0.6105	0.7029	0.7954	0.8879	0.9803	1.0728	1.1652	1.2577
152	0.3385	0.4333	0.5281	0.6228	0.7176	0.8124	0.9072	1.0020	1.0968	1.1916	1.2864
154	0.3438	0.4409	0.5381	0.6352	0.7323	0.8294	0.9266	1.0237	1.1208	1.2179	1.3151
156	0.3492	0.4486	0.5481	0.6476	0.7470	0.8465	0.9459	1.0454	1.1448	1.2443	1.3438
158	0.3545	0.4563	0.5581	0.6599	0.7617	0.8635	0.9653	1.0671	1.1689	1.2707	1.3725
160	0.3599	0.4640	0.5681	0.6723	0.7764	0.8805	0.9846	1.0888	1.1929	1.2970	1.4012
162	0.3652	0.4717	0.5782	0.6846	0.7911	0.8975	1.0040	1.1105	1.2169	1.3234	1.4299
164	0.3706	0.4794	0.5882	0.6970	0.8058	0.9146	1.0234	1.1322	1.2410	1.3498	1.4586
166	0.3759	0.4871	0.5982	0.7093	0.8205	0.9316	1.0427	1.1539	1.2650	1.3761	1.4872
168	0.3813	0.4948	0.6082	0.7217	0.8352	0.9486	1.0621	1.1755	1.2890	1.4025	1.5159
170	0.3866	0.5024	0.6182	0.7340	0.8498	0.9656	1.0814	1.1972	1.3130	1.4288	1.5446
172	0.3920	0.5101	0.6283	0.7464	0.8645	0.9827	1.1008	1.2189	1.3371	1.4552	1.5733
174	0.3974	0.5178	0.6383	0.7588	0.8792	0.9997	1.1202	1.2406	1.3611	1.4816	1.6020
176	0.4027	0.5255	0.6483	0.7711	0.8939	1.0167	1.1395	1.2623	1.3851	1.5079	1.6307
178	0.4081	0.5332	0.6583	0.7835	0.9086	1.0337	1.1589	1.2840	1.4092	1.5343	1.6594
180	0.4134	0.5409	0.6684	0.7958	0.9233	1.0508	1.1782	1.3057	1.4332	1.5607	1.6881
182	0.4188	0.5486	0.6784	0.8082	0.9380	1.0678	1.1976	1.3274	1.4572	1.5870	1.7168
184	0.4241	0.5563	0.6884	0.8205	0.9527	1.0848	1.2170	1.3491	1.4812	1.6134	1.7455
186	0.4295	0.5639	0.6984	0.8329	0.9674	1.1018	1.2363	1.3708	1.5053	1.6397	1.7742
188	0.4348	0.5716	0.7084	0.8453	0.9821	1.1189	1.2557	1.3925	1.5293	1.6661	1.8029
190	0.4402	0.5793	0.7185	0.8576	0.9968	1.1359	1.2750	1.4142	1.5533	1.6925	1.8316
192	0.4455	0.5870	0.7285	0.8700	1.0114	1.1529	1.2944	1.4359	1.5774	1.7188	1.8603
194	0.4509	0.5947	0.7385	0.8823	1.0261	1.1699	1.3138	1.4576	1.6014	1.7452	1.8890
196	0.4562	0.6024	0.7485	0.8947	1.0408	1.1870	1.3331	1.4793	1.6254	1.7716	1.9177
198	0.4616	0.6101	0.7586	0.9070	1.0555	1.2040	1.3525	1.5010	1.6494	1.7979	1.9464
200	0.4669	0.6178	0.7686	0.9194	1.0702	1.2210	1.3718	1.5226	1.6735	1.8243	1.9751

Table 12: Two way timber volume table (girth up to 50 cm top end) under bark in cubic meter for seedling origin rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
50	0.0655	0.0412	0.0170								
52	0.0707	0.0487	0.0267								
54	0.0758	0.0561	0.0364	0.0167							
56	0.0810	0.0636	0.0461	0.0287	0.0112						
58	0.0861	0.0710	0.0558	0.0407	0.0255	0.0104					
60	0.0913	0.0784	0.0656	0.0527	0.0398	0.0270	0.0141	0.0012			
62	0.0965	0.0859	0.0753	0.0647	0.0541	0.0435	0.0329	0.0224	0.0118		
64	0.1016	0.0933	0.0850	0.0767	0.0684	0.0601	0.0518	0.0435	0.0352	0.0269	0.0186
66	0.1068	0.1007	0.0947	0.0887	0.0827	0.0767	0.0706	0.0646	0.0586	0.0526	0.0466
68	0.1119	0.1082	0.1044	0.1007	0.0970	0.0932	0.0895	0.0858	0.0820	0.0783	0.0745
70	0.1171	0.1156	0.1142	0.1127	0.1113	0.1098	0.1084	0.1069	0.1054	0.1040	0.1025
72	0.1222	0.1231	0.1239	0.1247	0.1255	0.1264	0.1272	0.1280	0.1289	0.1297	0.1305
74	0.1274	0.1305	0.1336	0.1367	0.1398	0.1429	0.1461	0.1492	0.1523	0.1554	0.1585
76	0.1326	0.1379	0.1433	0.1487	0.1541	0.1595	0.1649	0.1703	0.1757	0.1811	0.1865
78	0.1377	0.1454	0.1531	0.1607	0.1684	0.1761	0.1838	0.1914	0.1991	0.2068	0.2145
80	0.1429	0.1528	0.1628	0.1727	0.1827	0.1927	0.2026	0.2126	0.2225	0.2325	0.2425
82	0.1480	0.1603	0.1725	0.1847	0.1970	0.2092	0.2215	0.2337	0.2460	0.2582	0.2704
84	0.1532	0.1677	0.1822	0.1968	0.2113	0.2258	0.2403	0.2548	0.2694	0.2839	0.2984
86	0.1583	0.1751	0.1919	0.2088	0.2256	0.2424	0.2592	0.2760	0.2928	0.3096	0.3264
88	0.1635	0.1826	0.2017	0.2208	0.2399	0.2589	0.2780	0.2971	0.3162	0.3353	0.3544
90	0.1686	0.1900	0.2114	0.2328	0.2541	0.2755	0.2969	0.3183	0.3396	0.3610	0.3824
92	0.1738	0.1975	0.2211	0.2448	0.2684	0.2921	0.3157	0.3394	0.3630	0.3867	0.4104
94	0.1790	0.2049	0.2308	0.2568	0.2827	0.3087	0.3346	0.3605	0.3865	0.4124	0.4383
96	0.1841	0.2123	0.2406	0.2688	0.2970	0.3252	0.3534	0.3817	0.4099	0.4381	0.4663
98	0.1893	0.2198	0.2503	0.2808	0.3113	0.3418	0.3723	0.4028	0.4333	0.4638	0.4943
100	0.1944	0.2272	0.2600	0.2928	0.3256	0.3584	0.3911	0.4239	0.4567	0.4895	0.5223
102	0.1996	0.2347	0.2697	0.3048	0.3399	0.3749	0.4100	0.4451	0.4801	0.5152	0.5503
104	0.2047	0.2421	0.2794	0.3168	0.3542	0.3915	0.4289	0.4662	0.5036	0.5409	0.5783
106	0.2099	0.2495	0.2892	0.3288	0.3684	0.4081	0.4477	0.4873	0.5270	0.5666	0.6062
108	0.2151	0.2570	0.2989	0.3408	0.3827	0.4246	0.4666	0.5085	0.5504	0.5923	0.6342
110	0.2202	0.2644	0.3086	0.3528	0.3970	0.4412	0.4854	0.5296	0.5738	0.6180	0.6622
112	0.2254	0.2719	0.3183	0.3648	0.4113	0.4578	0.5043	0.5508	0.5972	0.6437	0.6902
114	0.2305	0.2793	0.3281	0.3768	0.4256	0.4744	0.5231	0.5719	0.6207	0.6694	0.7182
116	0.2357	0.2867	0.3378	0.3888	0.4399	0.4909	0.5420	0.5930	0.6441	0.6951	0.7462
118	0.2408	0.2942	0.3475	0.4008	0.4542	0.5075	0.5608	0.6142	0.6675	0.7208	0.7742
120	0.2460	0.3016	0.3572	0.4128	0.4685	0.5241	0.5797	0.6353	0.6909	0.7465	0.8021
122	0.2512	0.3091	0.3669	0.4248	0.4827	0.5406	0.5985	0.6564	0.7143	0.7722	0.8301
124	0.2563	0.3165	0.3767	0.4368	0.4970	0.5572	0.6174	0.6776	0.7377	0.7979	0.8581
126	0.2615	0.3239	0.3864	0.4489	0.5113	0.5738	0.6362	0.6987	0.7612	0.8236	0.8861
128	0.2666	0.3314	0.3961	0.4609	0.5256	0.5903	0.6551	0.7198	0.7846	0.8493	0.9141
130	0.2718	0.3388	0.4058	0.4729	0.5399	0.6069	0.6739	0.7410	0.8080	0.8750	0.9421

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
132	0.2769	0.3462	0.4156	0.4849	0.5542	0.6235	0.6928	0.7621	0.8314	0.9007	0.9700
134	0.2821	0.3537	0.4253	0.4969	0.5685	0.6401	0.7117	0.7832	0.8548	0.9264	0.9980
136	0.2873	0.3611	0.4350	0.5089	0.5828	0.6566	0.7305	0.8044	0.8783	0.9521	1.0260
138	0.2924	0.3686	0.4447	0.5209	0.5970	0.6732	0.7494	0.8255	0.9017	0.9778	1.0540
140	0.2976	0.3760	0.4544	0.5329	0.6113	0.6898	0.7682	0.8467	0.9251	1.0035	1.0820
142	0.3027	0.3834	0.4642	0.5449	0.6256	0.7063	0.7871	0.8678	0.9485	1.0292	1.1100
144	0.3079	0.3909	0.4739	0.5569	0.6399	0.7229	0.8059	0.8889	0.9719	1.0549	1.1379
146	0.3130	0.3983	0.4836	0.5689	0.6542	0.7395	0.8248	0.9101	0.9954	1.0806	1.1659
148	0.3182	0.4058	0.4933	0.5809	0.6685	0.7561	0.8436	0.9312	1.0188	1.1063	1.1939
150	0.3233	0.4132	0.5031	0.5929	0.6828	0.7726	0.8625	0.9523	1.0422	1.1320	1.2219
152	0.3285	0.4206	0.5128	0.6049	0.6971	0.7892	0.8813	0.9735	1.0656	1.1577	1.2499
154	0.3337	0.4281	0.5225	0.6169	0.7113	0.8058	0.9002	0.9946	1.0890	1.1834	1.2779
156	0.3388	0.4355	0.5322	0.6289	0.7256	0.8223	0.9190	1.0157	1.1124	1.2091	1.3059
158	0.3440	0.4430	0.5419	0.6409	0.7399	0.8389	0.9379	1.0369	1.1359	1.2348	1.3338
160	0.3491	0.4504	0.5517	0.6529	0.7542	0.8555	0.9567	1.0580	1.1593	1.2606	1.3618
162	0.3543	0.4578	0.5614	0.6649	0.7685	0.8720	0.9756	1.0791	1.1827	1.2863	1.3898
164	0.3594	0.4653	0.5711	0.6769	0.7828	0.8886	0.9945	1.1003	1.2061	1.3120	1.4178
166	0.3646	0.4727	0.5808	0.6890	0.7971	0.9052	1.0133	1.1214	1.2295	1.3377	1.4458
168	0.3698	0.4802	0.5906	0.7010	0.8114	0.9218	1.0322	1.1426	1.2530	1.3634	1.4738
170	0.3749	0.4876	0.6003	0.7130	0.8256	0.9383	1.0510	1.1637	1.2764	1.3891	1.5017
172	0.3801	0.4950	0.6100	0.7250	0.8399	0.9549	1.0699	1.1848	1.2998	1.4148	1.5297
174	0.3852	0.5025	0.6197	0.7370	0.8542	0.9715	1.0887	1.2060	1.3232	1.4405	1.5577
176	0.3904	0.5099	0.6294	0.7490	0.8685	0.9880	1.1076	1.2271	1.3466	1.4662	1.5857
178	0.3955	0.5174	0.6392	0.7610	0.8828	1.0046	1.1264	1.2482	1.3701	1.4919	1.6137
180	0.4007	0.5248	0.6489	0.7730	0.8971	1.0212	1.1453	1.2694	1.3935	1.5176	1.6417
182	0.4059	0.5322	0.6586	0.7850	0.9114	1.0378	1.1641	1.2905	1.4169	1.5433	1.6696
184	0.4110	0.5397	0.6683	0.7970	0.9257	1.0543	1.1830	1.3116	1.4403	1.5690	1.6976
186	0.4162	0.5471	0.6781	0.8090	0.9399	1.0709	1.2018	1.3328	1.4637	1.5947	1.7256
188	0.4213	0.5546	0.6878	0.8210	0.9542	1.0875	1.2207	1.3539	1.4871	1.6204	1.7536
190	0.4265	0.5620	0.6975	0.8330	0.9685	1.1040	1.2395	1.3751	1.5106	1.6461	1.7816
192	0.4316	0.5694	0.7072	0.8450	0.9828	1.1206	1.2584	1.3962	1.5340	1.6718	1.8096
194	0.4368	0.5769	0.7169	0.8570	0.9971	1.1372	1.2772	1.4173	1.5574	1.6975	1.8376
196	0.4420	0.5843	0.7267	0.8690	1.0114	1.1537	1.2961	1.4385	1.5808	1.7232	1.8655
198	0.4471	0.5917	0.7364	0.8810	1.0257	1.1703	1.3150	1.4596	1.6042	1.7489	1.8935
200	0.4523	0.5992	0.7461	0.8930	1.0400	1.1869	1.3338	1.4807	1.6277	1.7746	1.9215

Table 13: Two way total volume table over bark in cubic meter for the clone PRIM-600 rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
30	0.0263	0.0297	0.0331	0.0366	0.0400	0.0434	0.0468	0.0502	0.0536	0.0570	0.0604
32	0.0320	0.0359	0.0398	0.0437	0.0476	0.0514	0.0553	0.0592	0.0631	0.0669	0.0708
34	0.0378	0.0422	0.0466	0.0510	0.0553	0.0597	0.0641	0.0685	0.0729	0.0772	0.0816
36	0.0437	0.0486	0.0535	0.0584	0.0634	0.0683	0.0732	0.0781	0.0830	0.0879	0.0928
38	0.0497	0.0552	0.0606	0.0661	0.0716	0.0770	0.0825	0.0880	0.0935	0.0989	0.1044
40	0.0558	0.0618	0.0679	0.0739	0.0800	0.0861	0.0921	0.0982	0.1043	0.1103	0.1164
42	0.0619	0.0686	0.0753	0.0820	0.0887	0.0953	0.1020	0.1087	0.1154	0.1221	0.1287
44	0.0682	0.0755	0.0828	0.0902	0.0975	0.1048	0.1122	0.1195	0.1268	0.1342	0.1415
46	0.0745	0.0825	0.0905	0.0986	0.1066	0.1146	0.1226	0.1306	0.1386	0.1467	0.1547
48	0.0809	0.0897	0.0984	0.1071	0.1159	0.1246	0.1333	0.1420	0.1508	0.1595	0.1682
50	0.0875	0.0969	0.1064	0.1159	0.1253	0.1348	0.1443	0.1538	0.1632	0.1727	0.1822
52	0.0941	0.1043	0.1146	0.1248	0.1351	0.1453	0.1555	0.1658	0.1760	0.1863	0.1965
54	0.1008	0.1118	0.1229	0.1339	0.1450	0.1560	0.1671	0.1781	0.1892	0.2002	0.2113
56	0.1076	0.1195	0.1313	0.1432	0.1551	0.1670	0.1789	0.1907	0.2026	0.2145	0.2264
58	0.1145	0.1272	0.1400	0.1527	0.1654	0.1782	0.1909	0.2037	0.2164	0.2292	0.2419
60	0.1214	0.1351	0.1487	0.1624	0.1760	0.1896	0.2033	0.2169	0.2306	0.2442	0.2578
62	0.1285	0.1431	0.1576	0.1722	0.1868	0.2013	0.2159	0.2305	0.2450	0.2596	0.2741
64	0.1357	0.1512	0.1667	0.1822	0.1977	0.2133	0.2288	0.2443	0.2598	0.2753	0.2909
66	0.1429	0.1594	0.1759	0.1924	0.2089	0.2254	0.2419	0.2584	0.2749	0.2914	0.3080
68	0.1503	0.1678	0.1853	0.2028	0.2203	0.2379	0.2554	0.2729	0.2904	0.3079	0.3254
70	0.1577	0.1763	0.1948	0.2134	0.2319	0.2505	0.2691	0.2876	0.3062	0.3248	0.3433
72	0.1652	0.1849	0.2045	0.2241	0.2438	0.2634	0.2831	0.3027	0.3223	0.3420	0.3616
74	0.1728	0.1936	0.2143	0.2351	0.2558	0.2766	0.2973	0.3181	0.3388	0.3595	0.3803
76	0.1805	0.2024	0.2243	0.2462	0.2681	0.2899	0.3118	0.3337	0.3556	0.3775	0.3994
78	0.1883	0.2114	0.2344	0.2575	0.2805	0.3036	0.3266	0.3497	0.3727	0.3958	0.4188
80	0.1962	0.2205	0.2447	0.2690	0.2932	0.3175	0.3417	0.3659	0.3902	0.4144	0.4387
82	0.2042	0.2297	0.2551	0.2806	0.3061	0.3316	0.3570	0.3825	0.4080	0.4335	0.4589
84	0.2123	0.2390	0.2657	0.2925	0.3192	0.3459	0.3727	0.3994	0.4261	0.4529	0.4796
86	0.2204	0.2484	0.2765	0.3045	0.3325	0.3605	0.3885	0.4166	0.4446	0.4726	0.5006
88	0.2287	0.2580	0.2873	0.3167	0.3460	0.3754	0.4047	0.4340	0.4634	0.4927	0.5221
90	0.2370	0.2677	0.2984	0.3291	0.3598	0.3905	0.4211	0.4518	0.4825	0.5132	0.5439
92	0.2454	0.2775	0.3096	0.3416	0.3737	0.4058	0.4378	0.4699	0.5020	0.5341	0.5661
94	0.2540	0.2874	0.3209	0.3544	0.3879	0.4214	0.4548	0.4883	0.5218	0.5553	0.5887
96	0.2626	0.2975	0.3324	0.3673	0.4022	0.4372	0.4721	0.5070	0.5419	0.5768	0.6117
98	0.2713	0.3077	0.3441	0.3804	0.4168	0.4532	0.4896	0.5260	0.5624	0.5988	0.6352
100	0.2801	0.3180	0.3559	0.3937	0.4316	0.4695	0.5074	0.5453	0.5832	0.6211	0.6590
102	0.2890	0.3284	0.3678	0.4072	0.4466	0.4861	0.5255	0.5649	0.6043	0.6437	0.6831
104	0.2979	0.3389	0.3799	0.4209	0.4619	0.5028	0.5438	0.5848	0.6258	0.6668	0.7077
106	0.3070	0.3496	0.3922	0.4347	0.4773	0.5199	0.5624	0.6050	0.6476	0.6901	0.7327
108	0.3162	0.3604	0.4046	0.4487	0.4929	0.5371	0.5813	0.6255	0.6697	0.7139	0.7581
110	0.3254	0.3713	0.4171	0.4630	0.5088	0.5546	0.6005	0.6463	0.6922	0.7380	0.7839
112	0.3348	0.3823	0.4298	0.4773	0.5249	0.5724	0.6199	0.6674	0.7150	0.7625	0.8100
114	0.3442	0.3934	0.4427	0.4919	0.5412	0.5904	0.6396	0.6889	0.7381	0.7873	0.8366
116	0.3537	0.4047	0.4557	0.5067	0.5576	0.6086	0.6596	0.7106	0.7616	0.8125	0.8635
118	0.3633	0.4161	0.4688	0.5216	0.5744	0.6271	0.6799	0.7326	0.7854	0.8381	0.8909
120	0.3730	0.4276	0.4822	0.5367	0.5913	0.6458	0.7004	0.7549	0.8095	0.8641	0.9186
122	0.3828	0.4392	0.4956	0.5520	0.6084	0.6648	0.7212	0.7776	0.8340	0.8904	0.9467
124	0.3927	0.4510	0.5092	0.5675	0.6257	0.6840	0.7423	0.8005	0.8588	0.9170	0.9753
126	0.4027	0.4629	0.5230	0.5832	0.6433	0.7034	0.7636	0.8237	0.8839	0.9440	1.0042
128	0.4128	0.4748	0.5369	0.5990	0.6611	0.7231	0.7852	0.8473	0.9094	0.9714	1.0335

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
130	0.4229	0.4870	0.5510	0.6150	0.6790	0.7431	0.8071	0.8711	0.9352	0.9992	1.0632
132	0.4332	0.4992	0.5652	0.6312	0.6972	0.7633	0.8293	0.8953	0.9613	1.0273	1.0933
134	0.4435	0.5116	0.5796	0.6476	0.7156	0.7837	0.8517	0.9197	0.9878	1.0558	1.1238
136	0.4540	0.5240	0.5941	0.6642	0.7343	0.8043	0.8744	0.9445	1.0146	1.0846	1.1547
138	0.4645	0.5366	0.6088	0.6809	0.7531	0.8252	0.8974	0.9695	1.0417	1.1138	1.1860
140	0.4751	0.5494	0.6236	0.6979	0.7721	0.8464	0.9206	0.9949	1.0692	1.1434	1.2177
142	0.4858	0.5622	0.6386	0.7150	0.7914	0.8678	0.9442	1.0206	1.0970	1.1734	1.2498
144	0.4966	0.5752	0.6537	0.7323	0.8108	0.8894	0.9680	1.0465	1.1251	1.2037	1.2822
146	0.5075	0.5882	0.6690	0.7498	0.8305	0.9113	0.9920	1.0728	1.1536	1.2343	1.3151
148	0.5185	0.6014	0.6844	0.7674	0.8504	0.9334	1.0164	1.0994	1.1824	1.2654	1.3483
150	0.5295	0.6148	0.7000	0.7853	0.8705	0.9558	1.0410	1.1263	1.2115	1.2967	1.3820
152	0.5407	0.6282	0.7158	0.8033	0.8908	0.9784	1.0659	1.1534	1.2410	1.3285	1.4160
154	0.5519	0.6418	0.7316	0.8215	0.9114	1.0012	1.0911	1.1809	1.2708	1.3606	1.4505
156	0.5633	0.6555	0.7477	0.8399	0.9321	1.0243	1.1165	1.2087	1.3009	1.3931	1.4853
158	0.5747	0.6693	0.7639	0.8585	0.9530	1.0476	1.1422	1.2368	1.3314	1.4259	1.5205
160	0.5862	0.6832	0.7802	0.8772	0.9742	1.0712	1.1682	1.2652	1.3622	1.4592	1.5561
162	0.5979	0.6973	0.7967	0.8961	0.9956	1.0950	1.1944	1.2939	1.3933	1.4927	1.5922
164	0.6096	0.7115	0.8134	0.9153	1.0172	1.1191	1.2210	1.3229	1.4248	1.5267	1.6286
166	0.6214	0.7258	0.8302	0.9346	1.0390	1.1434	1.2478	1.3522	1.4566	1.5610	1.6654
168	0.6332	0.7402	0.8471	0.9540	1.0610	1.1679	1.2748	1.3818	1.4887	1.5956	1.7026
170	0.6452	0.7547	0.8642	0.9737	1.0832	1.1927	1.3022	1.4117	1.5212	1.6307	1.7402
172	0.6573	0.7694	0.8815	0.9935	1.1056	1.2177	1.3298	1.4419	1.5540	1.6661	1.7781
174	0.6695	0.7842	0.8989	1.0136	1.1283	1.2430	1.3577	1.4724	1.5871	1.7018	1.8165
176	0.6817	0.7991	0.9164	1.0338	1.1511	1.2685	1.3859	1.5032	1.6206	1.7379	1.8553
178	0.6940	0.8141	0.9341	1.0542	1.1742	1.2943	1.4143	1.5343	1.6544	1.7744	1.8945
180	0.7065	0.8292	0.9520	1.0747	1.1975	1.3202	1.4430	1.5658	1.6885	1.8113	1.9340
182	0.7190	0.8445	0.9700	1.0955	1.2210	1.3465	1.4720	1.5975	1.7230	1.8485	1.9740
184	0.7316	0.8599	0.9882	1.1164	1.2447	1.3730	1.5012	1.6295	1.7578	1.8860	2.0143
186	0.7443	0.8754	1.0065	1.1375	1.2686	1.3997	1.5308	1.6618	1.7929	1.9240	2.0551
188	0.7571	0.8910	1.0249	1.1588	1.2928	1.4267	1.5606	1.6945	1.8284	1.9623	2.0962
190	0.7700	0.9068	1.0436	1.1803	1.3171	1.4539	1.5906	1.7274	1.8642	2.0010	2.1377
192	0.7830	0.9227	1.0623	1.2020	1.3417	1.4813	1.6210	1.7607	1.9003	2.0400	2.1797
194	0.7961	0.9386	1.0812	1.2238	1.3664	1.5090	1.6516	1.7942	1.9368	2.0794	2.2220
196	0.8092	0.9548	1.1003	1.2459	1.3914	1.5370	1.6825	1.8280	1.9736	2.1191	2.2647
198	0.8225	0.9710	1.1195	1.2681	1.4166	1.5651	1.7137	1.8622	2.0107	2.1593	2.3078
200	0.8358	0.9874	1.1389	1.2905	1.4420	1.5936	1.7451	1.8966	2.0482	2.1997	2.3513

Table 14: Two way total volume table under bark in cubic meter for the clone PRIM-600 rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
30	0.0256	0.029	0.0324	0.0358	0.0392	0.0426	0.046	0.0494	0.0528	0.0562	0.0596
32	0.0309	0.0348	0.0387	0.0425	0.0464	0.0502	0.0541	0.058	0.0618	0.0657	0.0695
34	0.0363	0.0407	0.045	0.0494	0.0538	0.0581	0.0625	0.0668	0.0712	0.0755	0.0799
36	0.0418	0.0467	0.0516	0.0565	0.0613	0.0662	0.0711	0.076	0.0809	0.0858	0.0907
38	0.0474	0.0528	0.0583	0.0637	0.0691	0.0746	0.08	0.0855	0.0909	0.0964	0.1018
40	0.053	0.0591	0.0651	0.0711	0.0772	0.0832	0.0892	0.0953	0.1013	0.1073	0.1134
42	0.0588	0.0654	0.0721	0.0787	0.0854	0.092	0.0987	0.1053	0.112	0.1186	0.1253
44	0.0646	0.0719	0.0792	0.0865	0.0938	0.1011	0.1084	0.1157	0.123	0.1303	0.1376
46	0.0705	0.0785	0.0865	0.0945	0.1025	0.1104	0.1184	0.1264	0.1344	0.1424	0.1503
48	0.0766	0.0853	0.0939	0.1026	0.1113	0.12	0.1287	0.1374	0.1461	0.1548	0.1634
50	0.0827	0.0921	0.1015	0.111	0.1204	0.1298	0.1392	0.1487	0.1581	0.1675	0.1769
52	0.0889	0.0991	0.1093	0.1195	0.1297	0.1399	0.1501	0.1602	0.1704	0.1806	0.1908
54	0.0952	0.1062	0.1172	0.1282	0.1392	0.1501	0.1611	0.1721	0.1831	0.1941	0.2051
56	0.1016	0.1134	0.1252	0.137	0.1489	0.1607	0.1725	0.1843	0.1962	0.208	0.2198
58	0.108	0.1207	0.1334	0.1461	0.1588	0.1714	0.1841	0.1968	0.2095	0.2222	0.2349
60	0.1146	0.1282	0.1417	0.1553	0.1689	0.1825	0.196	0.2096	0.2232	0.2368	0.2503
62	0.1212	0.1357	0.1502	0.1647	0.1792	0.1937	0.2082	0.2227	0.2372	0.2517	0.2662
64	0.128	0.1434	0.1589	0.1743	0.1898	0.2052	0.2207	0.2361	0.2515	0.267	0.2824
66	0.1348	0.1513	0.1677	0.1841	0.2005	0.217	0.2334	0.2498	0.2662	0.2826	0.2991
68	0.1418	0.1592	0.1766	0.1941	0.2115	0.2289	0.2464	0.2638	0.2812	0.2987	0.3161
70	0.1488	0.1672	0.1857	0.2042	0.2227	0.2411	0.2596	0.2781	0.2966	0.3151	0.3335
72	0.1559	0.1754	0.195	0.2145	0.2341	0.2536	0.2732	0.2927	0.3123	0.3318	0.3513
74	0.1631	0.1837	0.2044	0.225	0.2457	0.2663	0.287	0.3076	0.3283	0.3489	0.3696
76	0.1704	0.1921	0.2139	0.2357	0.2575	0.2793	0.301	0.3228	0.3446	0.3664	0.3882
78	0.1777	0.2007	0.2236	0.2466	0.2695	0.2924	0.3154	0.3383	0.3613	0.3842	0.4071
80	0.1852	0.2093	0.2335	0.2576	0.2817	0.3059	0.33	0.3541	0.3783	0.4024	0.4265
82	0.1928	0.2181	0.2435	0.2688	0.2942	0.3195	0.3449	0.3702	0.3956	0.4209	0.4463
84	0.2004	0.227	0.2536	0.2802	0.3068	0.3334	0.36	0.3867	0.4133	0.4399	0.4665
86	0.2082	0.236	0.2639	0.2918	0.3197	0.3476	0.3755	0.4034	0.4313	0.4591	0.487
88	0.216	0.2452	0.2744	0.3036	0.3328	0.362	0.3912	0.4204	0.4496	0.4788	0.508
90	0.2239	0.2545	0.285	0.3155	0.3461	0.3766	0.4072	0.4377	0.4682	0.4988	0.5293
92	0.2319	0.2638	0.2957	0.3277	0.3596	0.3915	0.4234	0.4553	0.4872	0.5192	0.5511
94	0.24	0.2733	0.3067	0.34	0.3733	0.4066	0.4399	0.4732	0.5066	0.5399	0.5732
96	0.2482	0.283	0.3177	0.3525	0.3872	0.422	0.4567	0.4915	0.5262	0.561	0.5957
98	0.2565	0.2927	0.3289	0.3651	0.4014	0.4376	0.4738	0.51	0.5462	0.5824	0.6186
100	0.2649	0.3026	0.3403	0.378	0.4157	0.4534	0.4911	0.5288	0.5665	0.6042	0.6419
102	0.2733	0.3126	0.3518	0.391	0.4303	0.4695	0.5087	0.5479	0.5872	0.6264	0.6656
104	0.2819	0.3227	0.3635	0.4042	0.445	0.4858	0.5266	0.5674	0.6082	0.6489	0.6897
106	0.2905	0.3329	0.3753	0.4176	0.46	0.5024	0.5447	0.5871	0.6295	0.6718	0.7142
108	0.2993	0.3433	0.3872	0.4312	0.4752	0.5192	0.5632	0.6071	0.6511	0.6951	0.7391
110	0.3081	0.3537	0.3993	0.445	0.4906	0.5362	0.5818	0.6275	0.6731	0.7187	0.7643
112	0.317	0.3643	0.4116	0.4589	0.5062	0.5535	0.6008	0.6481	0.6954	0.7427	0.79

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
114	0.326	0.375	0.424	0.473	0.522	0.571	0.62	0.669	0.718	0.7671	0.8161
116	0.3351	0.3859	0.4366	0.4873	0.5381	0.5888	0.6395	0.6903	0.741	0.7918	0.8425
118	0.3443	0.3968	0.4493	0.5018	0.5543	0.6068	0.6593	0.7118	0.7643	0.8168	0.8693
120	0.3536	0.4079	0.4622	0.5165	0.5708	0.6251	0.6794	0.7337	0.788	0.8423	0.8966
122	0.363	0.4191	0.4752	0.5313	0.5874	0.6436	0.6997	0.7558	0.8119	0.8681	0.9242
124	0.3724	0.4304	0.4884	0.5463	0.6043	0.6623	0.7203	0.7783	0.8362	0.8942	0.9522
126	0.382	0.4418	0.5017	0.5616	0.6214	0.6813	0.7411	0.801	0.8609	0.9207	0.9806
128	0.3916	0.4534	0.5152	0.5769	0.6387	0.7005	0.7623	0.8241	0.8858	0.9476	1.0094
130	0.4013	0.4651	0.5288	0.5925	0.6562	0.72	0.7837	0.8474	0.9111	0.9749	1.0386
132	0.4112	0.4769	0.5426	0.6083	0.674	0.7397	0.8054	0.8711	0.9368	1.0025	1.0682
134	0.4211	0.4888	0.5565	0.6242	0.6919	0.7596	0.8273	0.895	0.9627	1.0304	1.0981
136	0.4311	0.5008	0.5706	0.6403	0.71	0.7798	0.8495	0.9193	0.989	1.0587	1.1285
138	0.4412	0.513	0.5848	0.6566	0.7284	0.8002	0.872	0.9438	1.0156	1.0874	1.1592
140	0.4514	0.5253	0.5992	0.6731	0.747	0.8209	0.8948	0.9687	1.0426	1.1165	1.1904
142	0.4616	0.5377	0.6137	0.6897	0.7657	0.8418	0.9178	0.9938	1.0699	1.1459	1.2219
144	0.472	0.5502	0.6284	0.7066	0.7847	0.8629	0.9411	1.0193	1.0975	1.1757	1.2539
146	0.4824	0.5628	0.6432	0.7236	0.8039	0.8843	0.9647	1.0451	1.1254	1.2058	1.2862
148	0.493	0.5756	0.6582	0.7408	0.8234	0.906	0.9885	1.0711	1.1537	1.2363	1.3189
150	0.5036	0.5885	0.6733	0.7581	0.843	0.9278	1.0127	1.0975	1.1823	1.2672	1.352
152	0.5144	0.6015	0.6886	0.7757	0.8628	0.9499	1.0371	1.1242	1.2113	1.2984	1.3855
154	0.5252	0.6146	0.704	0.7934	0.8829	0.9723	1.0617	1.1511	1.2406	1.33	1.4194
156	0.5361	0.6278	0.7196	0.8114	0.9031	0.9949	1.0867	1.1784	1.2702	1.3619	1.4537
158	0.5471	0.6412	0.7353	0.8295	0.9236	1.0177	1.1119	1.206	1.3001	1.3942	1.4884
160	0.5582	0.6547	0.7512	0.8478	0.9443	1.0408	1.1373	1.2339	1.3304	1.4269	1.5234
162	0.5693	0.6683	0.7673	0.8662	0.9652	1.0641	1.1631	1.262	1.361	1.46	1.5589
164	0.5806	0.682	0.7834	0.8849	0.9863	1.0877	1.1891	1.2905	1.3919	1.4933	1.5948
166	0.592	0.6959	0.7998	0.9037	1.0076	1.1115	1.2154	1.3193	1.4232	1.5271	1.631
168	0.6034	0.7098	0.8163	0.9227	1.0291	1.1355	1.242	1.3484	1.4548	1.5612	1.6676
170	0.615	0.7239	0.8329	0.9419	1.0509	1.1598	1.2688	1.3778	1.4867	1.5957	1.7047
172	0.6266	0.7381	0.8497	0.9612	1.0728	1.1843	1.2959	1.4074	1.519	1.6305	1.7421
174	0.6383	0.7525	0.8666	0.9808	1.095	1.2091	1.3233	1.4374	1.5516	1.6658	1.7799
176	0.6501	0.7669	0.8837	1.0005	1.1173	1.2341	1.3509	1.4677	1.5845	1.7013	1.8181
178	0.662	0.7815	0.901	1.0204	1.1399	1.2594	1.3788	1.4983	1.6178	1.7373	1.8567
180	0.674	0.7962	0.9184	1.0405	1.1627	1.2849	1.407	1.5292	1.6514	1.7735	1.8957
182	0.6861	0.811	0.9359	1.0608	1.1857	1.3106	1.4355	1.5604	1.6853	1.8102	1.9351
184	0.6983	0.8259	0.9536	1.0813	1.2089	1.3366	1.4642	1.5919	1.7196	1.8472	1.9749
186	0.7106	0.841	0.9715	1.1019	1.2323	1.3628	1.4932	1.6237	1.7541	1.8846	2.015
188	0.7229	0.8562	0.9894	1.1227	1.256	1.3893	1.5225	1.6558	1.7891	1.9223	2.0556
190	0.7354	0.8715	1.0076	1.1437	1.2798	1.416	1.5521	1.6882	1.8243	1.9604	2.0966
192	0.7479	0.8869	1.0259	1.1649	1.3039	1.4429	1.5819	1.7209	1.8599	1.9989	2.1379
194	0.7605	0.9024	1.0443	1.1863	1.3282	1.4701	1.612	1.7539	1.8958	2.0377	2.1796
196	0.7732	0.9181	1.0629	1.2078	1.3526	1.4975	1.6423	1.7872	1.9321	2.0769	2.2218
198	0.786	0.9339	1.0817	1.2295	1.3773	1.5252	1.673	1.8208	1.9686	2.1165	2.2643
200	0.7989	0.9498	1.1006	1.2514	1.4022	1.5531	1.7039	1.8547	2.0055	2.1564	2.3072

Table 15: Two way timber volume table (girth up to 50 cm top end) over bark in cubic meter for the clone PRIM600 rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
50					0.0171	0.0256	0.0341	0.0426	0.0511	0.0596	0.0681
52				0.0162	0.0254	0.0346	0.0438	0.0530	0.0622	0.0714	0.0806
54			0.0140	0.0239	0.0338	0.0438	0.0537	0.0636	0.0736	0.0835	0.0934
56		0.0105	0.0212	0.0318	0.0425	0.0532	0.0639	0.0745	0.0852	0.0959	0.1066
58	0.0056	0.0170	0.0285	0.0399	0.0514	0.0628	0.0743	0.0857	0.0972	0.1086	0.1201
60	0.0114	0.0236	0.0359	0.0482	0.0604	0.0727	0.0849	0.0972	0.1094	0.1217	0.1340
62	0.0173	0.0304	0.0435	0.0566	0.0697	0.0827	0.0958	0.1089	0.1220	0.1351	0.1482
64	0.0233	0.0373	0.0512	0.0651	0.0791	0.0930	0.1070	0.1209	0.1349	0.1488	0.1628
66	0.0294	0.0442	0.0591	0.0739	0.0887	0.1035	0.1184	0.1332	0.1480	0.1629	0.1777
68	0.0356	0.0513	0.0670	0.0828	0.0985	0.1143	0.1300	0.1458	0.1615	0.1772	0.1930
70	0.0418	0.0585	0.0752	0.0918	0.1085	0.1252	0.1419	0.1586	0.1753	0.1919	0.2086
72	0.0481	0.0658	0.0834	0.1011	0.1187	0.1364	0.1540	0.1717	0.1893	0.2070	0.2246
74	0.0545	0.0732	0.0918	0.1105	0.1291	0.1478	0.1664	0.1850	0.2037	0.2223	0.2410
76	0.0610	0.0807	0.1004	0.1200	0.1397	0.1594	0.1790	0.1987	0.2183	0.2380	0.2577
78	0.0676	0.0883	0.1090	0.1297	0.1505	0.1712	0.1919	0.2126	0.2333	0.2540	0.2747
80	0.0742	0.0960	0.1178	0.1396	0.1614	0.1832	0.2050	0.2268	0.2486	0.2704	0.2922
82	0.0810	0.1039	0.1268	0.1497	0.1726	0.1955	0.2183	0.2412	0.2641	0.2870	0.3099
84	0.0878	0.1118	0.1358	0.1599	0.1839	0.2079	0.2319	0.2560	0.2800	0.3040	0.3280
86	0.0947	0.1199	0.1451	0.1702	0.1954	0.2206	0.2458	0.2710	0.2962	0.3213	0.3465
88	0.1017	0.1280	0.1544	0.1808	0.2071	0.2335	0.2599	0.2862	0.3126	0.3390	0.3653
90	0.1087	0.1363	0.1639	0.1915	0.2191	0.2466	0.2742	0.3018	0.3294	0.3569	0.3845
92	0.1159	0.1447	0.1735	0.2023	0.2312	0.2600	0.2888	0.3176	0.3464	0.3752	0.4041
94	0.1231	0.1532	0.1833	0.2134	0.2434	0.2735	0.3036	0.3337	0.3638	0.3939	0.4240
96	0.1304	0.1618	0.1932	0.2245	0.2559	0.2873	0.3187	0.3501	0.3814	0.4128	0.4442
98	0.1378	0.1705	0.2032	0.2359	0.2686	0.3013	0.3340	0.3667	0.3994	0.4321	0.4648
100	0.1453	0.1793	0.2134	0.2474	0.2815	0.3155	0.3496	0.3836	0.4177	0.4517	0.4858
102	0.1528	0.1882	0.2237	0.2591	0.2945	0.3299	0.3654	0.4008	0.4362	0.4716	0.5071
104	0.1605	0.1973	0.2341	0.2709	0.3078	0.3446	0.3814	0.4182	0.4551	0.4919	0.5287
106	0.1682	0.2064	0.2447	0.2829	0.3212	0.3595	0.3977	0.4360	0.4742	0.5125	0.5507
108	0.1760	0.2157	0.2554	0.2951	0.3348	0.3745	0.4143	0.4540	0.4937	0.5334	0.5731
110	0.1839	0.2250	0.2662	0.3074	0.3486	0.3898	0.4310	0.4722	0.5134	0.5546	0.5958
112	0.1918	0.2345	0.2772	0.3199	0.3627	0.4054	0.4481	0.4908	0.5335	0.5762	0.6189
114	0.1999	0.2441	0.2884	0.3326	0.3768	0.4211	0.4653	0.5096	0.5538	0.5981	0.6423
116	0.2080	0.2538	0.2996	0.3454	0.3912	0.4371	0.4829	0.5287	0.5745	0.6203	0.6661
118	0.2162	0.2636	0.3110	0.3584	0.4058	0.4532	0.5006	0.5480	0.5955	0.6429	0.6903
120	0.2245	0.2735	0.3225	0.3716	0.4206	0.4696	0.5186	0.5677	0.6167	0.6657	0.7148
122	0.2328	0.2835	0.3342	0.3849	0.4355	0.4862	0.5369	0.5876	0.6383	0.6889	0.7396
124	0.2413	0.2936	0.3460	0.3983	0.4507	0.5031	0.5554	0.6078	0.6601	0.7125	0.7648
126	0.2498	0.3039	0.3579	0.4120	0.4660	0.5201	0.5742	0.6282	0.6823	0.7363	0.7904
128	0.2584	0.3142	0.3700	0.4258	0.4816	0.5374	0.5931	0.6489	0.7047	0.7605	0.8163
130	0.2671	0.3247	0.3822	0.4398	0.4973	0.5548	0.6124	0.6699	0.7275	0.7850	0.8425
132	0.2759	0.3352	0.3946	0.4539	0.5132	0.5725	0.6319	0.6912	0.7505	0.8098	0.8692
134	0.2848	0.3459	0.4070	0.4682	0.5293	0.5905	0.6516	0.7127	0.7739	0.8350	0.8961
136	0.2937	0.3567	0.4197	0.4826	0.5456	0.6086	0.6716	0.7345	0.7975	0.8605	0.9235
138	0.3027	0.3676	0.4324	0.4973	0.5621	0.6269	0.6918	0.7566	0.8215	0.8863	0.9511
140	0.3118	0.3786	0.4453	0.5120	0.5788	0.6455	0.7122	0.7790	0.8457	0.9124	0.9792
142	0.3210	0.3897	0.4583	0.5270	0.5956	0.6643	0.7330	0.8016	0.8703	0.9389	1.0076
144	0.3303	0.4009	0.4715	0.5421	0.6127	0.6833	0.7539	0.8245	0.8951	0.9657	1.0363
146	0.3396	0.4122	0.4848	0.5574	0.6300	0.7025	0.7751	0.8477	0.9203	0.9928	1.0654
148	0.3491	0.4237	0.4982	0.5728	0.6474	0.7220	0.7965	0.8711	0.9457	1.0203	1.0949

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
150	0.3586	0.4352	0.5118	0.5884	0.6650	0.7416	0.8182	0.8948	0.9715	1.0481	1.1247
152	0.3682	0.4469	0.5255	0.6042	0.6828	0.7615	0.8402	0.9188	0.9975	1.0762	1.1548
154	0.3779	0.4586	0.5394	0.6201	0.7009	0.7816	0.8624	0.9431	1.0238	1.1046	1.1853
156	0.3876	0.4705	0.5533	0.6362	0.7191	0.8019	0.8848	0.9676	1.0505	1.1334	1.2162
158	0.3975	0.4825	0.5675	0.6525	0.7375	0.8224	0.9074	0.9924	1.0774	1.1624	1.2474
160	0.4074	0.4945	0.5817	0.6689	0.7560	0.8432	0.9304	1.0175	1.1047	1.1918	1.2790
162	0.4174	0.5067	0.5961	0.6855	0.7748	0.8642	0.9535	1.0429	1.1322	1.2216	1.3109
164	0.4275	0.5190	0.6106	0.7022	0.7938	0.8853	0.9769	1.0685	1.1601	1.2516	1.3432
166	0.4376	0.5315	0.6253	0.7191	0.8129	0.9068	1.0006	1.0944	1.1882	1.2820	1.3759
168	0.4479	0.5440	0.6401	0.7362	0.8323	0.9284	1.0245	1.1206	1.2167	1.3128	1.4089
170	0.4582	0.5566	0.6550	0.7534	0.8518	0.9502	1.0486	1.1470	1.2454	1.3438	1.4422
172	0.4686	0.5694	0.6701	0.7708	0.8715	0.9723	1.0730	1.1737	1.2744	1.3752	1.4759
174	0.4791	0.5822	0.6853	0.7884	0.8915	0.9945	1.0976	1.2007	1.3038	1.4069	1.5100
176	0.4897	0.5952	0.7006	0.8061	0.9116	1.0170	1.1225	1.2280	1.3334	1.4389	1.5444
178	0.5004	0.6082	0.7161	0.8240	0.9319	1.0397	1.1476	1.2555	1.3634	1.4713	1.5791
180	0.5111	0.6214	0.7317	0.8420	0.9524	1.0627	1.1730	1.2833	1.3936	1.5039	1.6142
182	0.5219	0.6347	0.7475	0.8603	0.9730	1.0858	1.1986	1.3114	1.4242	1.5369	1.6497
184	0.5328	0.6481	0.7634	0.8786	0.9939	1.1092	1.2245	1.3397	1.4550	1.5703	1.6855
186	0.5438	0.6616	0.7794	0.8972	1.0150	1.1328	1.2506	1.3683	1.4861	1.6039	1.7217
188	0.5549	0.6752	0.7955	0.9159	1.0362	1.1566	1.2769	1.3972	1.5176	1.6379	1.7583
190	0.5660	0.6889	0.8118	0.9348	1.0577	1.1806	1.3035	1.4264	1.5493	1.6722	1.7951
192	0.5772	0.7028	0.8283	0.9538	1.0793	1.2048	1.3303	1.4558	1.5814	1.7069	1.8324
194	0.5886	0.7167	0.8448	0.9730	1.1011	1.2293	1.3574	1.4856	1.6137	1.7418	1.8700
196	0.6000	0.7307	0.8615	0.9923	1.1231	1.2539	1.3847	1.5155	1.6463	1.7771	1.9079
198	0.6114	0.7449	0.8784	1.0119	1.1454	1.2788	1.4123	1.5458	1.6793	1.8128	1.9462
200	0.6230	0.7592	0.8954	1.0316	1.1677	1.3039	1.4401	1.5763	1.7125	1.8487	1.9849

Table 16: Two way timber volume table (girth up to 50 cm top end) under bark in cubic meter for the clone PRIM600 rubber trees growing in Bangladesh

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
50					0.0166	0.0251	0.0336	0.0421	0.0506	0.059	0.0675
52				0.0153	0.0245	0.0337	0.0429	0.052	0.0612	0.0704	0.0796
54			0.0128	0.0227	0.0326	0.0425	0.0524	0.0623	0.0722	0.0821	0.092
56			0.0195	0.0302	0.0408	0.0515	0.0621	0.0728	0.0834	0.0941	0.1047
58		0.015	0.0264	0.0379	0.0493	0.0607	0.0721	0.0835	0.095	0.1064	0.1178
60		0.0212	0.0335	0.0457	0.0579	0.0701	0.0824	0.0946	0.1068	0.119	0.1312
62	0.0145	0.0276	0.0406	0.0537	0.0667	0.0798	0.0928	0.1059	0.1189	0.132	0.145
64	0.0201	0.034	0.048	0.0619	0.0758	0.0897	0.1036	0.1175	0.1314	0.1453	0.1592
66	0.0258	0.0406	0.0554	0.0702	0.085	0.0998	0.1145	0.1293	0.1441	0.1589	0.1737
68	0.0316	0.0473	0.063	0.0787	0.0944	0.1101	0.1258	0.1415	0.1572	0.1729	0.1886
70	0.0374	0.0541	0.0707	0.0873	0.104	0.1206	0.1372	0.1539	0.1705	0.1871	0.2038
72	0.0433	0.0609	0.0785	0.0961	0.1137	0.1313	0.1489	0.1665	0.1841	0.2017	0.2193
74	0.0494	0.0679	0.0865	0.1051	0.1237	0.1423	0.1609	0.1795	0.1981	0.2167	0.2353
76	0.0554	0.0751	0.0947	0.1143	0.1339	0.1535	0.1731	0.1927	0.2123	0.2319	0.2515
78	0.0616	0.0823	0.1029	0.1236	0.1442	0.1649	0.1855	0.2062	0.2268	0.2475	0.2681
80	0.0679	0.0896	0.1113	0.133	0.1548	0.1765	0.1982	0.2199	0.2417	0.2634	0.2851
82	0.0742	0.097	0.1198	0.1427	0.1655	0.1883	0.2112	0.234	0.2568	0.2796	0.3025
84	0.0806	0.1046	0.1285	0.1525	0.1764	0.2004	0.2243	0.2483	0.2722	0.2962	0.3201
86	0.0871	0.1122	0.1373	0.1624	0.1875	0.2126	0.2377	0.2629	0.288	0.3131	0.3382
88	0.0937	0.12	0.1463	0.1725	0.1988	0.2251	0.2514	0.2777	0.304	0.3303	0.3566
90	0.1003	0.1278	0.1553	0.1828	0.2103	0.2378	0.2653	0.2928	0.3203	0.3478	0.3753
92	0.1071	0.1358	0.1645	0.1933	0.222	0.2507	0.2795	0.3082	0.3369	0.3657	0.3944
94	0.1139	0.1439	0.1739	0.2039	0.2339	0.2639	0.2939	0.3239	0.3539	0.3839	0.4139
96	0.1208	0.1521	0.1834	0.2147	0.2459	0.2772	0.3085	0.3398	0.3711	0.4024	0.4337
98	0.1278	0.1604	0.193	0.2256	0.2582	0.2908	0.3234	0.356	0.3886	0.4212	0.4538
100	0.1348	0.1688	0.2027	0.2367	0.2706	0.3046	0.3385	0.3725	0.4064	0.4404	0.4743
102	0.142	0.1773	0.2126	0.2479	0.2833	0.3186	0.3539	0.3892	0.4245	0.4599	0.4952
104	0.1492	0.1859	0.2227	0.2594	0.2961	0.3328	0.3695	0.4062	0.443	0.4797	0.5164
106	0.1565	0.1947	0.2328	0.271	0.3091	0.3472	0.3854	0.4235	0.4617	0.4998	0.538
108	0.1639	0.2035	0.2431	0.2827	0.3223	0.3619	0.4015	0.4411	0.4807	0.5203	0.5599
110	0.1714	0.2125	0.2535	0.2946	0.3357	0.3768	0.4178	0.4589	0.5	0.5411	0.5822
112	0.1789	0.2215	0.2641	0.3067	0.3493	0.3919	0.4344	0.477	0.5196	0.5622	0.6048
114	0.1866	0.2307	0.2748	0.3189	0.3631	0.4072	0.4513	0.4954	0.5395	0.5836	0.6278
116	0.1943	0.24	0.2857	0.3313	0.377	0.4227	0.4684	0.5141	0.5597	0.6054	0.6511
118	0.2021	0.2494	0.2966	0.3439	0.3912	0.4384	0.4857	0.533	0.5802	0.6275	0.6748
120	0.21	0.2589	0.3077	0.3566	0.4055	0.4544	0.5033	0.5522	0.601	0.6499	0.6988
122	0.2179	0.2685	0.319	0.3695	0.42	0.4706	0.5211	0.5716	0.6222	0.6727	0.7232
124	0.226	0.2782	0.3304	0.3826	0.4348	0.487	0.5392	0.5914	0.6436	0.6958	0.748
126	0.2341	0.288	0.3419	0.3958	0.4497	0.5036	0.5575	0.6114	0.6653	0.7192	0.7731
128	0.2423	0.2979	0.3535	0.4092	0.4648	0.5204	0.576	0.6316	0.6873	0.7429	0.7985
130	0.2506	0.308	0.3653	0.4227	0.4801	0.5374	0.5948	0.6522	0.7096	0.7669	0.8243

Gbh (cm)	Volume in cubic meters for the Height class in meter										
	6	8	10	12	14	16	18	20	22	24	26
132	0.259	0.3181	0.3773	0.4364	0.4956	0.5547	0.6139	0.673	0.7322	0.7913	0.8505
134	0.2674	0.3284	0.3893	0.4503	0.5112	0.5722	0.6331	0.6941	0.7551	0.816	0.877
136	0.2759	0.3387	0.4015	0.4643	0.5271	0.5899	0.6527	0.7155	0.7783	0.841	0.9038
138	0.2846	0.3492	0.4139	0.4785	0.5432	0.6078	0.6725	0.7371	0.8018	0.8664	0.9311
140	0.2932	0.3598	0.4263	0.4929	0.5594	0.6259	0.6925	0.759	0.8255	0.8921	0.9586
142	0.302	0.3705	0.4389	0.5074	0.5758	0.6443	0.7127	0.7812	0.8496	0.9181	0.9865
144	0.3109	0.3813	0.4517	0.5221	0.5925	0.6629	0.7332	0.8036	0.874	0.9444	1.0148
146	0.3198	0.3922	0.4645	0.5369	0.6093	0.6816	0.754	0.8264	0.8987	0.9711	1.0434
148	0.3288	0.4032	0.4776	0.5519	0.6263	0.7006	0.775	0.8494	0.9237	0.9981	1.0724
150	0.3379	0.4143	0.4907	0.5671	0.6435	0.7199	0.7962	0.8726	0.949	1.0254	1.1018
152	0.3471	0.4256	0.504	0.5824	0.6609	0.7393	0.8177	0.8962	0.9746	1.053	1.1315
154	0.3564	0.4369	0.5174	0.5979	0.6784	0.7589	0.8395	0.92	1.0005	1.081	1.1615
156	0.3657	0.4484	0.531	0.6136	0.6962	0.7788	0.8614	0.944	1.0267	1.1093	1.1919
158	0.3752	0.4599	0.5447	0.6294	0.7142	0.7989	0.8836	0.9684	1.0531	1.1379	1.2226
160	0.3847	0.4716	0.5585	0.6454	0.7323	0.8192	0.9061	0.993	1.0799	1.1668	1.2537
162	0.3943	0.4834	0.5724	0.6615	0.7506	0.8397	0.9288	1.0179	1.107	1.1961	1.2852
164	0.4039	0.4952	0.5865	0.6779	0.7692	0.8605	0.9518	1.0431	1.1344	1.2257	1.317
166	0.4137	0.5072	0.6008	0.6943	0.7879	0.8814	0.975	1.0685	1.1621	1.2556	1.3491
168	0.4235	0.5193	0.6152	0.711	0.8068	0.9026	0.9984	1.0942	1.19	1.2858	1.3817
170	0.4334	0.5315	0.6297	0.7278	0.8259	0.924	1.0221	1.1202	1.2183	1.3164	1.4145
172	0.4434	0.5439	0.6443	0.7447	0.8452	0.9456	1.046	1.1465	1.2469	1.3473	1.4477
174	0.4535	0.5563	0.6591	0.7619	0.8646	0.9674	1.0702	1.173	1.2758	1.3785	1.4813
176	0.4637	0.5688	0.674	0.7791	0.8843	0.9895	1.0946	1.1998	1.3049	1.4101	1.5152
178	0.4739	0.5815	0.689	0.7966	0.9042	1.0117	1.1193	1.2268	1.3344	1.442	1.5495
180	0.4842	0.5942	0.7042	0.8142	0.9242	1.0342	1.1442	1.2542	1.3642	1.4742	1.5841
182	0.4947	0.6071	0.7195	0.832	0.9444	1.0569	1.1693	1.2818	1.3942	1.5067	1.6191
184	0.5051	0.6201	0.735	0.8499	0.9649	1.0798	1.1947	1.3097	1.4246	1.5395	1.6545
186	0.5157	0.6332	0.7506	0.868	0.9855	1.1029	1.2204	1.3378	1.4553	1.5727	1.6902
188	0.5264	0.6463	0.7663	0.8863	1.0063	1.1263	1.2463	1.3662	1.4862	1.6062	1.7262
190	0.5371	0.6596	0.7822	0.9047	1.0273	1.1498	1.2724	1.3949	1.5175	1.64	1.7626
192	0.5479	0.673	0.7982	0.9233	1.0485	1.1736	1.2988	1.4239	1.5491	1.6742	1.7993
194	0.5588	0.6866	0.8143	0.9421	1.0699	1.1976	1.3254	1.4531	1.5809	1.7087	1.8364
196	0.5698	0.7002	0.8306	0.961	1.0914	1.2218	1.3522	1.4827	1.6131	1.7435	1.8739
198	0.5808	0.7139	0.847	0.9801	1.1132	1.2463	1.3794	1.5124	1.6455	1.7786	1.9117
200	0.592	0.7278	0.8635	0.9993	1.1351	1.2709	1.4067	1.5425	1.6783	1.8141	1.9499


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