distribuição diamétrica

treelab - UFVJM | Prof. Eric Bastos Gorgens

v.0.2

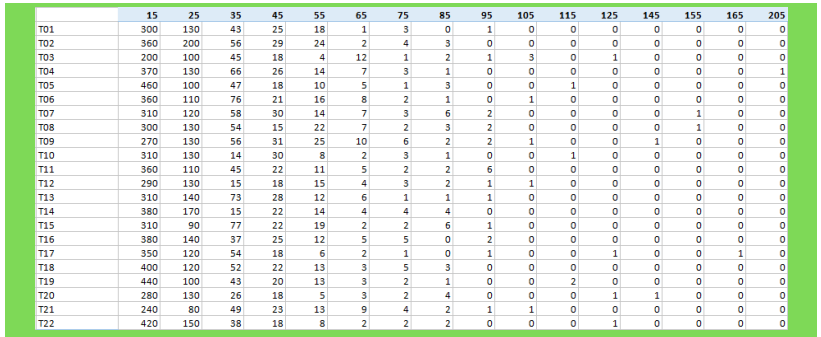
expressa a distribuição dos indivíduos da floresta em classes de diâmetro regulares.

3 $$vol = exp(-7,62812 + 2,18090 * ln(dap))$$

2 $$AS = pi * \frac{dap^2}{40000}$$

1 $$CC = inteiro(\frac{DAP}{IC}) * IC + \frac{IC}{2}$$

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	parcela	arv	comum	cientifico	familia	dap	vertical	luminosidade	hcom	ht	cc	as	vol
2	T01	1	macucu	Licania guianensis	Chrysobalanaceae	10,3	S	2	4,59	7,83			
3	T01	2	casca seca	Licania canescens	Chrysobalanaceae	14,6	S	2	9,16	10,27			
4	T01	3	cajuacu	Anacardium spruceanum	Anacardiaceae	78,8	E	1	21,06	31,65			
5	T01	4	breu branco	Protium paniculatum	Burseraceae	14,7	S	2	7,35	11,54			
6	T01	5	breu branco	Protium paniculatum	Burseraceae	10,6	E	3	4,9	6,91			
7	T01	6	caramuxi	Pouteria hispida	Sapotaceae	27,1	C	2	13,53	19,83			
8	T01	7	casca seca	Licania canescens	Chrysobalanaceae	15,1	E	2	7,44	12,09			
9	T01	8	jatereu	Lecythis idatimon	Lecythidaceae	16,5	S	2	7,61	11,46			
10	T01	9	jatereu	Lecythis idatimon	Lecythidaceae	12	S	1	8,41	12,26			
11	T01	10	parajuba	Manilkara bidentata	Sapotaceae	38,4	C	2	31,19	32,29			
12	T01	11	guajara branco	Pouteria sp.	Sapotaceae	48,5	C	2	20,84	31,1			



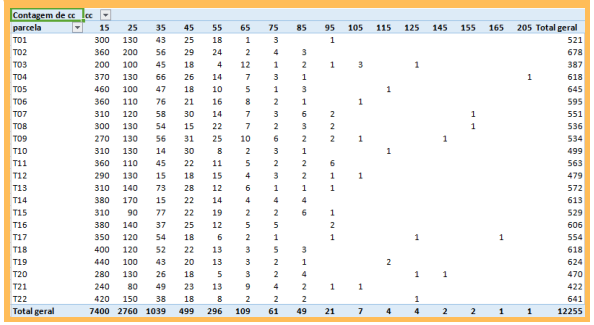
	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205
T01	300	130	43	25	18	1	3	0	1	0	0	0	0	0	0	0
T02	360	200	56	29	24	2	4	3	0	0	0	0	0	0	0	0
T03	200	100	45	18	4	12	1	2	1	3	0	1	0	0	0	0
T04	370	130	66	26	14	7	3	1	0	0	0	0	0	0	0	1
T05	460	100	47	18	10	5	1	3	0	0	1	0	0	0	0	0
T06	360	110	76	21	16	8	2	1	0	1	0	0	0	0	0	0
T07	310	120	58	30	14	7	3	6	2	0	0	0	0	1	0	0
T08	300	130	54	15	22	7	2	3	2	0	0	0	0	1	0	0
T09	270	130	56	31	25	10	6	2	2	1	0	0	1	0	0	0
T10	310	130	14	30	8	2	3	1	0	0	1	0	0	0	0	0
T11	360	110	45	22	11	5	2	2	6	0	0	0	0	0	0	0
T12	290	130	15	18	15	4	3	2	1	1	0	0	0	0	0	0
T13	310	140	73	28	12	6	1	1	1	0	0	0	0	0	0	0
T14	380	170	15	22	14	4	4	4	0	0	0	0	0	0	0	0
T15	310	90	77	22	19	2	2	6	1	0	0	0	0	0	0	0
T16	380	140	37	25	12	5	5	0	2	0	0	0	0	0	0	0
T17	350	120	54	18	6	2	1	0	1	0	0	1	0	0	1	0
T18	400	120	52	22	13	3	5	3	0	0	0	0	0	0	0	0
T19	440	100	43	20	13	3	2	1	0	0	2	0	0	0	0	0
T20	280	130	26	18	5	3	2	4	0	0	0	1	1	0	0	0
T21	240	80	49	23	13	9	4	2	1	1	0	0	0	0	0	0
T22	420	150	38	18	8	2	2	2	0	0	0	1	0	0	0	0

6 Número de árvores por hectare por classe de diâmetro:

$$\overline{Nha} = \frac{\sum coluna}{Nparc}$$

5 Passar o número de árvore por classe e por parcela na base por hectare:

$$Nha = Narv * \frac{10000}{AreaParcela}$$



Contagem de cc	cc																
parcela	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205	Total geral
T01	300	130	43	25	18	1	3		1								521
T02	360	200	56	29	24	2	4	3									678
T03	200	100	45	18	4	12	1	2	1	3		1					387
T04	370	130	66	26	14	7	3	1								1	618
T05	460	100	47	18	10	5	1	3			1						645
T06	360	110	76	21	16	8	2	1		1							595
T07	310	120	58	30	14	7	3	6	2					1			551
T08	300	130	54	15	22	7	2	3	2					1			536
T09	270	130	56	31	25	10	6	2	2	1			1				534
T10	310	130	14	30	8	2	3	1			1						499
T11	360	110	45	22	11	5	2	2	6								563
T12	290	130	15	18	15	4	3	2	1	1							479
T13	310	140	73	28	12	6	1	1	1								572
T14	380	170	15	22	14	4	4	4									613
T15	310	90	77	22	19	2	2	6	1								529
T16	380	140	37	25	12	5	5		2								606
T17	350	120	54	18	6	2	1		1			1			1		554
T18	400	120	52	22	13	3	5	3									618
T19	440	100	43	20	13	3	2	1			2						624
T20	280	130	26	18	5	3	2	4				1	1				470
T21	240	80	49	23	13	9	4	2	1	1							422
T22	420	150	38	18	8	2	2	2				1					641
Total geral	7400	2760	1039	499	296	109	61	49	21	7	4	4	2	2	1	1	12255

4 Tabela dinâmica

7

	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205
Narv med	336,36	125,45	47,23	22,68	13,45	4,95	2,77	2,23	0,95	0,32	0,18	0,18	0,09	0,09	0,05	0,05

distribuição área basal

treelab - UFVJM | Prof. Eric Bastos Gorgens

v.0.2

expressa a distribuição da área basal da floresta em classes de diâmetro regulares.

3 $$vol = exp(-7,62812 + 2,18090 * ln(dap))$$

2 $$AS = pi * \frac{dap^2}{40000}$$

1 $$CC = inteiro(\frac{DAP}{IC}) * IC + \frac{IC}{2}$$

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	parcela	arv	comum	cientifico	familia	dap	vertical	luminosidade	hcom	ht	cc	as	vol
2	T01	1	macucu	Licania guianensis	Chrysobalanaceae	10,3	S	2	4,59	7,83			
3	T01	2	casca seca	Licania canescens	Chrysobalanaceae	14,6	S	2	9,16	10,27			
4	T01	3	cajuacu	Anacardium spruceanum	Anacardiaceae	78,8	E	1	21,06	31,65			
5	T01	4	breu branco	Protium paniculatum	Burseraceae	14,7	S	2	7,35	11,54			
6	T01	5	breu branco	Protium paniculatum	Burseraceae	10,6	E	3	4,9	6,91			
7	T01	6	caramuxi	Pouteria hispida	Sapotaceae	27,1	C	2	13,53	19,83			
8	T01	7	casca seca	Licania canescens	Chrysobalanaceae	15,1	E	2	7,44	12,09			
9	T01	8	jatereu	Lecythis idatimon	Lecythidaceae	16,5	S	2	7,61	11,46			
10	T01	9	jatereu	Lecythis idatimon	Lecythidaceae	12	S	1	8,41	12,26			
11	T01	10	parajuba	Manilkara bidentata	Sapotaceae	38,4	C	2	31,19	32,29			
12	T01	11	guajara branco	Pouteria sp.	Sapotaceae	48,5	C	2	20,84	31,1			

	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205
T01	300	130	43	25	18	1	3	0	1	0	0	0	0	0	0	0
T02	360	200	56	29	24	2	4	3	0	0	0	0	0	0	0	0
T03	200	100	45	18	4	12	1	2	1	3	0	1	0	0	0	0
T04	370	130	66	26	14	7	3	1	0	0	0	0	0	0	0	1
T05	460	100	47	18	10	5	1	3	0	0	1	0	0	0	0	0
T06	360	110	76	21	16	8	2	1	0	1	0	0	0	0	0	0
T07	310	120	58	30	14	7	3	6	2	0	0	0	0	1	0	0
T08	300	130	54	15	22	7	2	3	2	0	0	0	0	1	0	0
T09	270	130	56	31	25	10	6	2	2	1	0	0	1	0	0	0
T10	310	130	14	30	8	2	3	1	0	0	1	0	0	0	0	0
T11	360	110	45	22	11	5	2	2	6	0	0	0	0	0	0	0
T12	290	130	15	18	15	4	3	2	1	1	0	0	0	0	0	0
T13	310	140	73	28	12	6	1	1	1	0	0	0	0	0	0	0
T14	380	170	15	22	14	4	4	4	0	0	0	0	0	0	0	0
T15	310	90	77	22	19	2	2	6	1	0	0	0	0	0	0	0
T16	380	140	37	25	12	5	5	0	2	0	0	0	0	0	0	0
T17	350	120	54	18	6	2	1	0	1	0	0	1	0	0	1	0
T18	400	120	52	22	13	3	5	3	0	0	0	0	0	0	0	0
T19	440	100	43	20	13	3	2	1	0	0	2	0	0	0	0	0
T20	280	130	26	18	5	3	2	4	0	0	0	1	1	0	0	0
T21	240	80	49	23	13	9	4	2	1	1	0	0	0	0	0	0
T22	420	150	38	18	8	2	2	2	0	0	0	1	0	0	0	0

6 Área basal por classe de diâmetro:

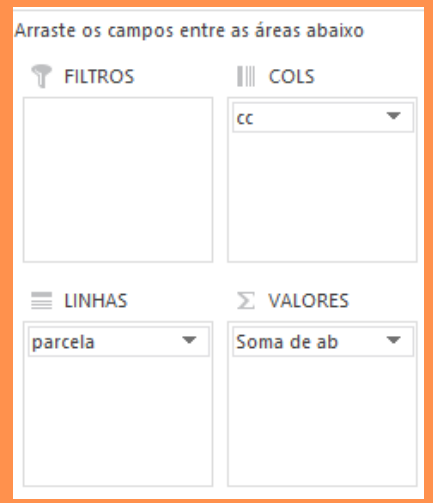
$$\overline{AB} = \frac{\sum coluna}{Nparc}$$

5 Transformar área seccional em área basal

$$AB = AS * \frac{10000}{AreaParcela}$$

Contagem de cc	cc																
parcela	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205	Total geral
T01	300	130	43	25	18	1	3		1								521
T02	360	200	56	29	24	2	4	3									678
T03	200	100	45	18	4	12	1	2	1	3		1					387
T04	370	130	66	26	14	7	3	1								1	618
T05	460	100	47	18	10	5	1	3			1						645
T06	360	110	76	21	16	8	2	1		1							595
T07	310	120	58	30	14	7	3	6	2					1			551
T08	300	130	54	15	22	7	2	3	2					1			536
T09	270	130	56	31	25	10	6	2	2	1			1				534
T10	310	130	14	30	8	2	3	1			1						499
T11	360	110	45	22	11	5	2	2	6								563
T12	290	130	15	18	15	4	3	2	1	1							479
T13	310	140	73	28	12	6	1	1	1								572
T14	380	170	15	22	14	4	4	4									613
T15	310	90	77	22	19	2	2	6	1								529
T16	380	140	37	25	12	5	5		2								606
T17	350	120	54	18	6	2	1		1			1			1		554
T18	400	120	52	22	13	3	5	3									618
T19	440	100	43	20	13	3	2	1			2						624
T20	280	130	26	18	5	3	2	4				1	1				470
T21	240	80	49	23	13	9	4	2	1	1							422
T22	420	150	38	18	8	2	2	2				1					641
Total geral	7400	2760	1039	499	296	109	61	49	21	7	4	4	2	2	1	1	12255

4 Tabela dinâmica



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	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205
AB	5,36	5,80	4,36	3,49	3,07	1,60	1,19	1,24	0,66	0,28	0,18	0,22	0,15	0,16	0,10	0,14

distribuição volumétrica

treelab - UFVJM | Prof. Eric Bastos Gorgens

v.0.2

expressa a distribuição do volume da floresta em classes de diâmetro regulares.

3 $$vol = exp(-7,62812 + 2,18090 * ln(dap))$$

2 $$AS = pi * \frac{dap^2}{40000}$$

1 $$CC = inteiro(\frac{DAP}{IC}) * IC + \frac{IC}{2}$$

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	parcela	arv	comum	cientifico	familia	dap	vertical	luminosidade	hcom	ht	cc	as	vol
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9	T01	8	jatereu	Lecythis idatimon	Lecythidaceae	16,5	S	2	7,61	11,46			
10	T01	9	jatereu	Lecythis idatimon	Lecythidaceae	12	S	1	8,41	12,26			
11	T01	10	parajuba	Manilkara bidentata	Sapotaceae	38,4	C	2	31,19	32,29			
12	T01	11	guajara branco	Pouteria sp.	Sapotaceae	48,5	C	2	20,84	31,1			

	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205
T01	300	130	43	25	18	1	3	0	1	0	0	0	0	0	0	0
T02	360	200	56	29	24	2	4	3	0	0	0	0	0	0	0	0
T03	200	100	45	18	4	12	1	2	1	3	0	1	0	0	0	0
T04	370	130	66	26	14	7	3	1	0	0	0	0	0	0	0	1
T05	460	100	47	18	10	5	1	3	0	0	1	0	0	0	0	0
T06	360	110	76	21	16	8	2	1	0	1	0	0	0	0	0	0
T07	310	120	58	30	14	7	3	6	2	0	0	0	0	1	0	0
T08	300	130	54	15	22	7	2	3	2	0	0	0	0	1	0	0
T09	270	130	56	31	25	10	6	2	2	1	0	0	1	0	0	0
T10	310	130	14	30	8	2	3	1	0	0	1	0	0	0	0	0
T11	360	110	45	22	11	5	2	2	6	0	0	0	0	0	0	0
T12	290	130	15	18	15	4	3	2	1	1	0	0	0	0	0	0
T13	310	140	73	28	12	6	1	1	1	0	0	0	0	0	0	0
T14	380	170	15	22	14	4	4	4	0	0	0	0	0	0	0	0
T15	310	90	77	22	19	2	2	6	1	0	0	0	0	0	0	0
T16	380	140	37	25	12	5	5	0	2	0	0	0	0	0	0	0
T17	350	120	54	18	6	2	1	0	1	0	0	1	0	0	1	0
T18	400	120	52	22	13	3	5	3	0	0	0	0	0	0	0	0
T19	440	100	43	20	13	3	2	1	0	0	2	0	0	0	0	0
T20	280	130	26	18	5	3	2	4	0	0	0	1	1	0	0	0
T21	240	80	49	23	13	9	4	2	1	1	0	0	0	0	0	0
T22	420	150	38	18	8	2	2	2	0	0	0	1	0	0	0	0

6 Área basal por classe de diâmetro:

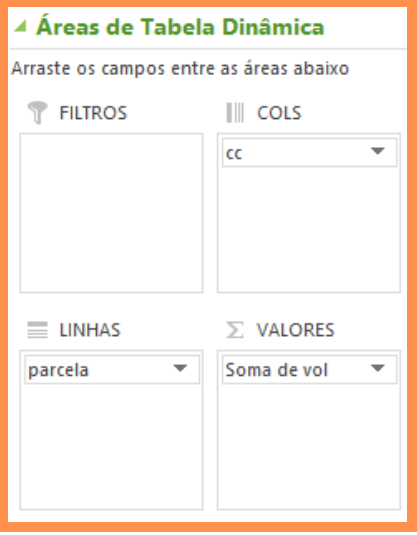
$$\overline{Vol} = \frac{\sum coluna}{Nparc}$$

5 Transformar volume da parcela em volume por hectare

$$vol = vol_{parc} * \frac{10000}{AreaParcela}$$

Contagem de cc	cc																
parcela	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205	Total geral
T01	300	130	43	25	18	1	3		1								521
T02	360	200	56	29	24	2	4	3									678
T03	200	100	45	18	4	12	1	2	1	3		1					387
T04	370	130	66	26	14	7	3	1								1	618
T05	460	100	47	18	10	5	1	3			1						645
T06	360	110	76	21	16	8	2	1		1							595
T07	310	120	58	30	14	7	3	6	2					1			551
T08	300	130	54	15	22	7	2	3	2					1			536
T09	270	130	56	31	25	10	6	2	2	1			1				534
T10	310	130	14	30	8	2	3	1			1						499
T11	360	110	45	22	11	5	2	2	6								563
T12	290	130	15	18	15	4	3	2	1	1							479
T13	310	140	73	28	12	6	1	1	1								572
T14	380	170	15	22	14	4	4	4									613
T15	310	90	77	22	19	2	2	6	1								529
T16	380	140	37	25	12	5	5		2								606
T17	350	120	54	18	6	2	1		1			1			1		554
T18	400	120	52	22	13	3	5	3									618
T19	440	100	43	20	13	3	2	1			2						624
T20	280	130	26	18	5	3	2	4				1	1				470
T21	240	80	49	23	13	9	4	2	1	1							422
T22	420	150	38	18	8	2	2	2				1					641
Total geral	7400	2760	1039	499	296	109	61	49	21	7	4	4	2	2	1	1	12255

4 Tabela dinâmica



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	15	25	35	45	55	65	75	85	95	105	115	125	145	155	165	205
Vol	54,1720	64,1794	51,2811	42,9793	39,1808	21,1070	16,0054	17,0725	9,3644	3,9785	2,6257	3,1887	2,2386	2,4943	1,4965	2,3070