BIOMASS ON A FRAGMENT OF THE ATLANTIC FOREST AT THE STATE OF ESPIRITO SANTO, BRAZIL

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For five decades ago the Atlantic Forest covers 16% of the land,

2015 less than 7% of the original area = 110 million hectares in fragmented areas without biological corridors

70% of the population (more than 140 million) lives in these biome.

Has more than 3000 tree species, 15000 plant species

Is one of the most diverse forest of the world.

Six plots of 400 m² (20 x 20m)

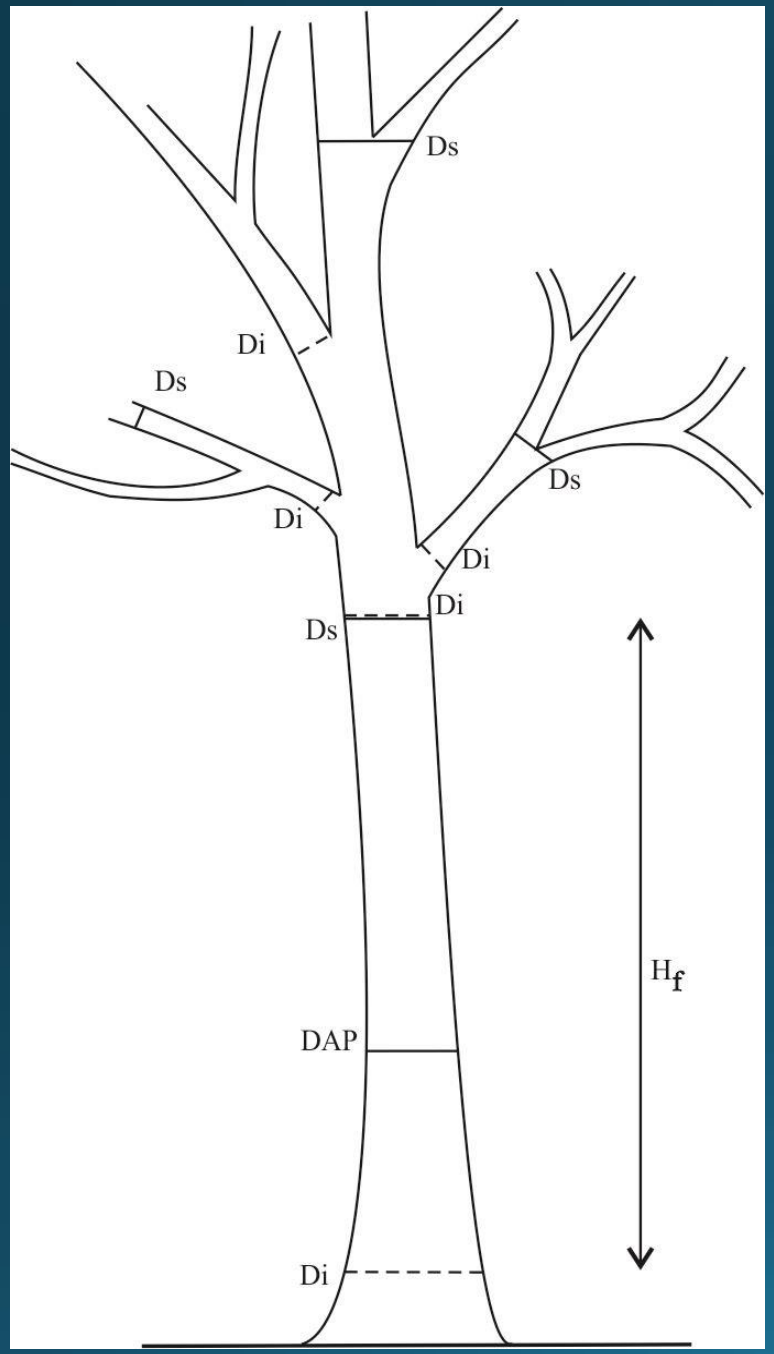
randomly distribution

sampling area 2400 m²

all trees and palms were identified and measured

were found 341 individuals

70 species, 32 families



Trees and palms with DHB over 5 cm

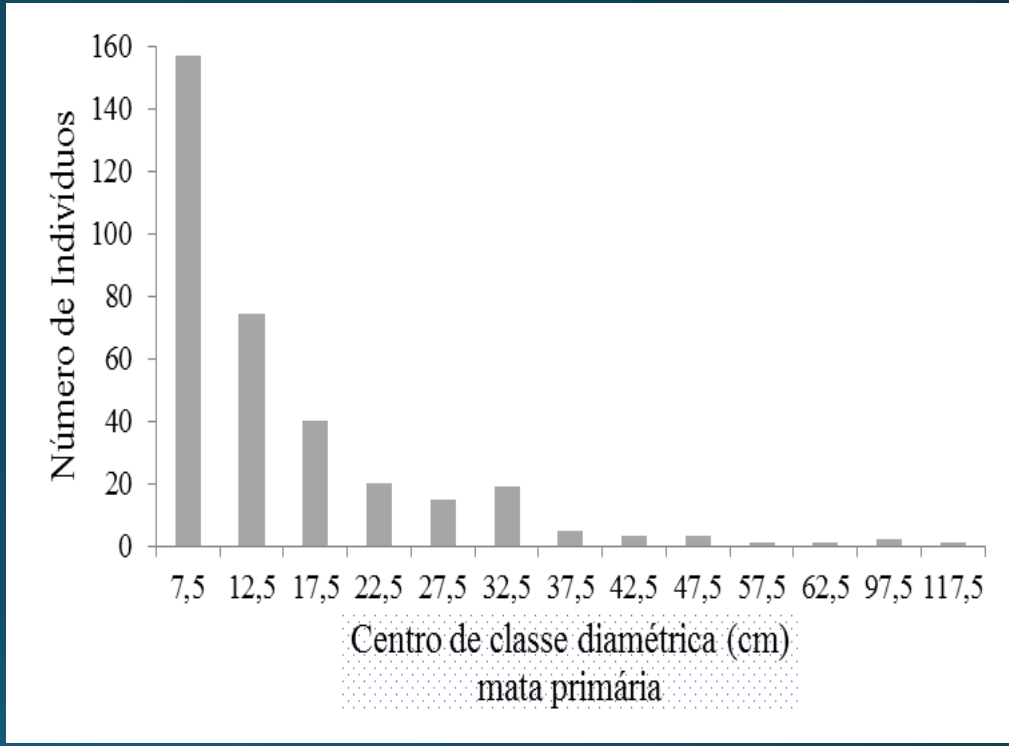
Volume calculation through the Smalian equation

$(Di + Ds)/2 \cdot H$

stem and branches volume

Vol · Wood density = Biomass

Especie	Basic		DHB	volume n	volume m	volume	Volume n	Biomass	biomass	Biomass	Biomass
	density		medio	stem	branch	total		stem	Branch	total	
	kg/m³	n	cm	m³	m³	m³	m³/ha	kg	kg	kg	kg/ha
Aegip sellow	512	2	11,5	0,1061		0,1061	0,4417	54,37		54,37	226,18
Agona brasil	880	1	13,0	0,1837	0,0085	0,1923	0,8000	161,73	7,52	169,25	704,08
Alcho triplin	503	1	7,5	0,0353		0,0353	0,1470	17,78		17,78	73,96
Anade macro	860	1	22,5	0,5725	0,1005	0,6730	2,7999	492,4	86,44	578,84	2407,97
Aspid subin	880	2	9,5	0,0651		0,0651	0,2711	57,37		57,37	238,66
Basil brasi	374	12	20,04	5,9201	1,0835	7,0037	29,1354	2.214,15	405,24	2.619,39	10896,66
Cabr canjer	670	1	10,0	0,0117		0,0117	0,0490	7,89		7,89	32,82
...											
Total		341		105,09	19,50	124,60	518,33	80.807	14.786	95.594	397.674



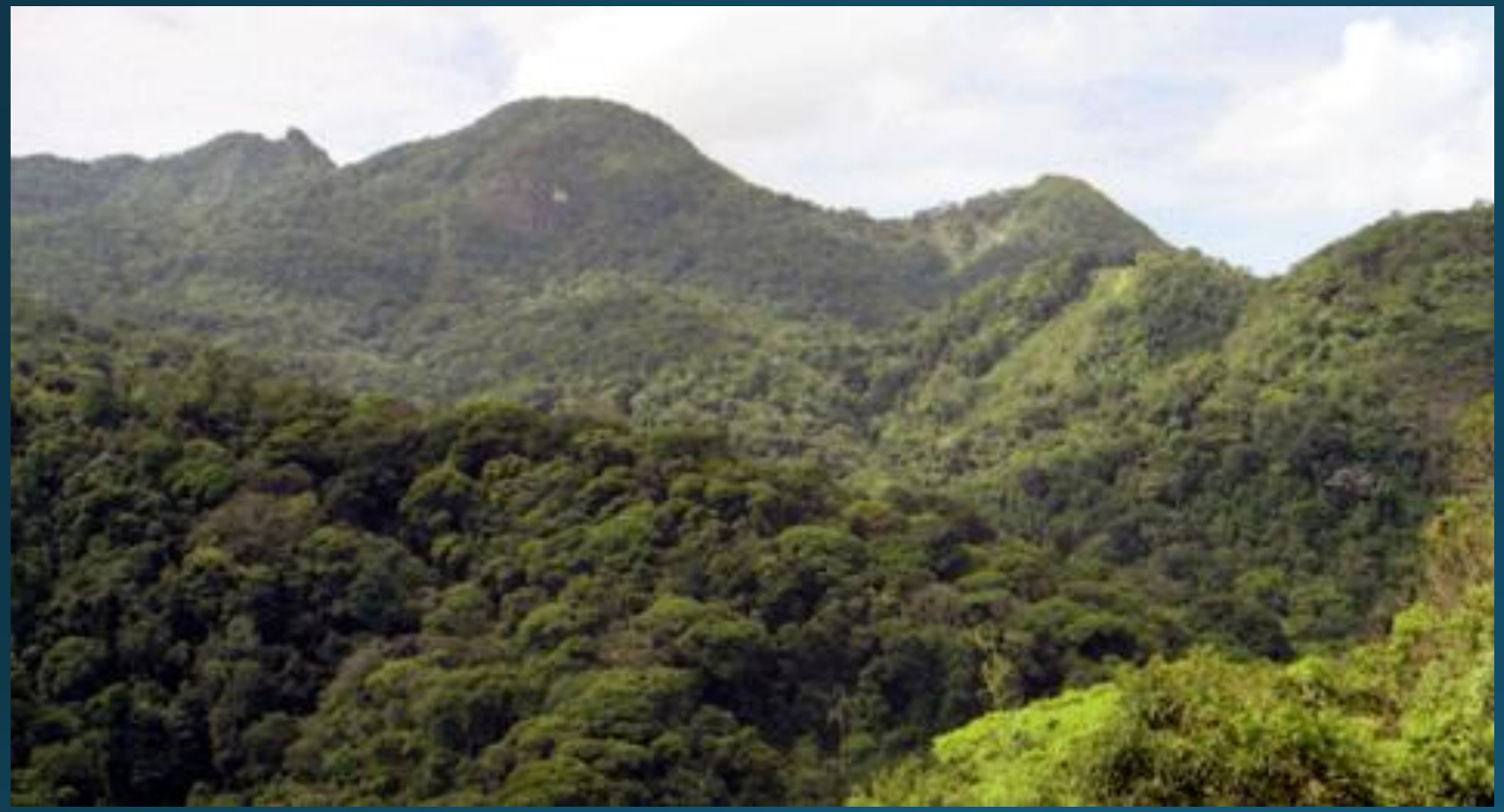
Results

Volume in m^3

Vol. stem	105.09
Vol. branches	19.50
Vol. total	124.60
m^3/ha	518.33

Biomass in kg

BM. stem	80,807
BM. branches	14,780
BM. total	95,594
kg/ha	397,674



Thanks'

for your attention