



Supplementary Material

Nitrogen Pools in Tropical Plantations of N₂-Fixing and Non-N₂-Fixing Legume Trees under Different Tree Stand Densities

Kelly Nery Bighi ¹, Ranieri Ribeiro Paula ^{1,2,*}, Marcos Vinícius Winckler Caldeira ¹, Diego Lang Burak ², Eduardo de Sá Mendonça ², Paulo Henrique de Souza ³, William Macedo Delarmelina ⁴
and Fabiano de Carvalho Balieiro ⁵

¹ Centro de Ciências Agrárias e Engenharias, Departamento de Ciências Florestais e da Madeira, Programa de Pós-Graduação em Ciências Florestais, Universidade Federal do Espírito Santo 29550-000, Jerônimo Monteiro Brazil; kellyneryb@yahoo.com.br (K.N.B.); mvwcaldeira@gmail.com (M.V.W.C.)

² Centro de Ciências Agrárias e Engenharias, Departamento de Agronomia, Programa de Pós-Graduação em Produção Vegetal, Universidade Federal do Espírito Santo, 29500-000, Alegre, Brazil; dblurak@hotmail.com (D.L.B.); eduardo.mendonca@ufes.br (E.S.M.)

³ Departamento Acadêmico de Agricultura e Ambiente, Instituto Federal de Educação, Ciência e Tecnologia do Sudeste de Minas Gerais, 36180-000, Rio Pomba, Brazil; engflorestalphs@gmail.com;

⁴ Coordenadoria do Curso Técnico em Florestas, Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, 29395-000, Ibatiba, Brazil; william.delarmelina@ifes.edu.br.

⁵ Embrapa Solos, 05407-002, Rio de Janeiro, Brazil; fabiano.balieiro@embrapa.br

* Correspondence: ranierirpaula@gmail.com

Table 1. Mean values of soil attributes (0–20 cm) before the establishment of the monospecific stands of *A. peregrina* and *S. parahyba*.

Species	Block	Texture	pH	P	K	Ca	Mg	CEC	OM
			(H ₂ O)	---- mg dm ⁻³ ----	----- cmolc dm ⁻³ -----	-	-	g kg ⁻¹	
<i>A. peregrina</i>	B1Ap	Clay	5.9	2.0	75.1	3.5	2.0	8.6	20.9
	B2Ap	Medium	6.0	1.9	68.6	4.4	2.3	9.7	24.8
	B3Ap	Clay	5.5	2.2	66.7	1.2	1.0	5.4	21.0
<i>S. parahyba</i>	B1Sp	Clay	5.2	1.8	42.3	1.0	0.8	5.0	14.0
	B2Sp	Medium	5.7	1.7	90.2	1.7	1.3	5.7	15.1
	B3Sp	Medium	6.1	2.7	95.4	3.4	1.5	7.8	19.6

The soil analysis was carried out following Embrapa (1997). Where: pH in H₂O 1: 2.5 (v/v) of soil: solution; P and K extracted by Mehlich-1 and determined, respectively, by flame photometry and colorimetry; Ca and Mg extracted by one mol L⁻¹ KCl solution and determined by atomic absorption spectrometry; T -Cation exchange capacity at pH 7 (CTC). Soil physical characterization was performed by slow-stirring particle size analysis, obtaining the silt and clay fractions by the pipette method. Source: 53,54