

MATERIAL SUPLEMENTARIO

Supplementary material: Valuation of ecosystem services of guadua bamboo (*Guadua angustifolia*) forest in the southwestern of Pereira, Colombia

Material suplementario: Valoración de servicios ecosistémicos de bosques de guadua (*Guadua angustifolia*) al suroeste de Pereira, Colombia

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Annex 1. Laboratory techniques used to determine physical properties of soils of guadua bamboo forests in the southwestern region of the municipality of Pereira, Colombia.

Soil property	Unit of measurement	Technique used
Apparent density (Da)	g cm ³	Cylinders method
Real density (Dr)	g cm ³	Pycnometer
Total porosity (TP)	%	[Dr– Da]/Dr]*100
Macroporosity	%	Tension table
Meso- and microporosity	%	Tension plates
Aggregate stability	%	Yoder's method
Aggregate distribution	%	Sharker screens and movement
Compaction	Mpa	Penetrometer

Annex 2. Laboratory techniques used to determine chemical properties of soils of guadua bamboo forests in the southwestern region of the municipality of Pereira, Colombia.

Soil chemical property	Unit of measurement	Laboratory technique
Soil reaction (pH)		Potentiometric method
Total nitrogen (N)	%	Semimicro version Kjeldhal procedure
Organic matter (OM)	%	Walkley-Black colorimetry
Potassium (K)	cmols L ⁻¹	Ammonium acetate
Calcium (Ca)	cmols L ⁻¹	Ammonium acetate
Magnesium (Mg)	cmols L ⁻¹	Ammonium acetate
Sodium (Na)	cmols L ⁻¹	Ammonium acetate
Aluminum (Al)	cmols L ⁻¹	KCl IM-EAA
Cation exchange capacity (CEC)	cmols L ⁻¹	Ammonium acetate 1N. pH 7.0
Phosphorus (P)	Ppm	Bray II, Bray Kurtz colorimetry
Effective cation exchange capacity (ECEC)	cmols L ⁻¹	(Ca + Mg + Na + K + Al)
Total bases (TB)	cmols L ⁻¹	(Ca + Mg + Na + K)
Base saturation (BS)	%	TB / CEC*100
Effective base saturation (EBS)	%	TB / ECEC*100
Aluminum saturation (ALS)	%	Al / ECEC*100
Organic carbon (OC)	%	OM / 1.7