

Organic matter cycling along geochemical, geomorphic and disturbance gradients in vegetation and soils of African tropical forests and cropland - Project TropSOC DATABASE_v1.0

2.1.4. Forest – Vegetation – Fresh leaves chemistry aggregated at species level

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Introduction

The dataset comprises a unique plot identifier and tree species names, followed by 22 variables that describe the chemical properties of living canopy leaves aggregated at the species level. Missing values are indicated by -9999.

Data structure

No.	Variable	Explanation	Unit
1	plotID	unique identifier of each plot and point where data were collected	-
2	species	species of tree	-
3	mean_N	mean nitrogen in sampled fresh leaves	%
4	sd_N	standard deviation of mean nitrogen in sampled fresh leaves	%
5	mean_C	mean carbon in sampled fresh leaves	%
6	sd_C	standard deviation of mean carbon in sampled fresh leaves	%
7	mean_Al	mean aluminium in sampled fresh leaves	mg kg ⁻¹
8	sd_Al	standard deviation of mean aluminium in sampled fresh leaves	mg kg ⁻¹
9	mean_Ca	mean calcium in sampled fresh leaves	mg kg ⁻¹
10	sd_Ca	standard deviation of mean calcium in sampled fresh leaves	mg kg ⁻¹
11	mean_Fe	mean iron in sampled fresh leaves	mg kg ⁻¹
12	sd_Fe	standard deviation of mean iron in sampled fresh leaves	mg kg ⁻¹
13	mean_K	mean potassium in sampled fresh leaves	mg kg ⁻¹
14	sd_K	standard deviation of mean potassium in sampled fresh leaves	mg kg ⁻¹
15	mean_Mg	mean magnesium in sampled fresh leaves	mg kg ⁻¹
16	sd_Mg	standard deviation of mean magnesium in sampled fresh leaves	mg kg ⁻¹
17	mean_Mn	mean manganese in sampled fresh leaves	mg kg ⁻¹
18	sd_Mn	standard deviation of mean manganese in sampled fresh leaves	mg kg ⁻¹
19	mean_Na	mean sodium in sampled fresh leaves	mg kg ⁻¹
20	sd_Na	standard deviation of mean sodium in sampled fresh leaves	mg kg ⁻¹
21	mean_P	mean phosphorous in sampled fresh leaves	mg kg ⁻¹
22	sd_P	standard deviation of mean phosphorous in sampled fresh leaves	mg kg ⁻¹
23	mean_Si	mean silicon in sampled fresh leaves	mg kg ⁻¹
24	sd_Si	standard deviation of mean silicon in sampled fresh leaves	mg kg ⁻¹

Methods

This aggregated dataset is based on the fresh leaf dataset with values for individual canopy leaves (213_fresh_leaves.csv). Details regarding the sampling and analysis are given in 213_fresh_leaves.pdf. The aggregation done for the presented canopy leaf data is done on the species level within each forest plot.

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