Supplementary Materials:

Table S1. Thematic layers used in the ecogeographic characterization in cassava collection.

Variable	Unit/category	Component *
Annual average temperature	°C	Bioclimatic
Isothermality	°C	Bioclimatic
Temperature seasonality	°C	Bioclimatic
Maximum temperature for the warmest month	°C	Bioclimatic
Minimum temperature for the coldest month	°C	Bioclimatic
Annual temperature range	°C	Bioclimatic
Average temperature for the coldest quarter (3 coldest months)	°C	Bioclimatic
Average temperature for the quarter with most rainfall (3 rainiest months)	°C	Bioclimatic
Average temperature for the hottest quarter (3 hottest months)	°C	Bioclimatic
Maximum temperature for January	°C	Bioclimatic
Maximum temperature for February	°C	Bioclimatic
Maximum temperature for March	°C	Bioclimatic
Maximum temperature for April	°C	Bioclimatic
Maximum temperature for May	°C	Bioclimatic
Maximum temperature for June	°C	Bioclimatic
Maximum temperature for July	°C	Bioclimatic
Minimum temperature for January	°C	Bioclimatic
Minimum temperature for February	°C	Bioclimatic
Minimum temperature for March	°C	Bioclimatic
Minimum temperature for April	°C	Bioclimatic
Minimum temperature for May	°C	Bioclimatic
Minimum temperature for June	°C	Bioclimatic
Minimum temperature for July	°C	Bioclimatic
Minimum temperature for August	°C	Bioclimatic
Minimum temperature for September	°C	Bioclimatic
Minimum temperature for October	°C	Bioclimatic
Minimum temperature for December	°C	Bioclimatic
Average temperature for January	°C	Bioclimatic
Average temperature for February	°C	Bioclimatic
Average temperature for March	°C	Bioclimatic
Average temperature for April	°C	Bioclimatic
Average temperature for May	°C	Bioclimatic
Average temperature for June	°C	Bioclimatic
Average temperature for July	°C	Bioclimatic
Average temperature for August	°C	Bioclimatic
Average temperature for October	°C	Bioclimatic
Average temperature for December	°C	Bioclimatic
Rainfall during the hottest quarter (3 hottest months)	mm	Bioclimatic
Average rainfall for May	mm	Bioclimatic
Average rainfall for August	mm	Bioclimatic
Average rainfall for October	mm	Bioclimatic
Elevation	m	Geophysical
Slope	1 Flat (0–2°), Very smooth (2–5°), Smooth (5–12°)	Geophysical
Surface soil pH in a soil-water solution	1 Very acid, 2 Acid, 3 Moderately acid, 4 Slightly acid, 5 Practically neutral, 6 Neutral	Edaphic
pH in subsoil in soil-water solution	1 Very acid, 2 Acid, 3 Moderately acid, 4 Slightly acid, 5 Practically neutral, 6 Neutral	Edaphic
Organic carbon content in surface soil	1 Very low, 2 Low, 3 Medium, 4 High	Edaphic

Total exchangeable bases in surface soil	1 Low fertility, 2 Medium fertility, 3 High fertility	Edaphic
Cation exchange capacity in surface soil	1 Very low, 2 Low, 3 Medium	Edaphic
Clay cation exchange capacity in surface	1 Very low, 2 Low, 3 Medium, 4 High, 5 Very high	Edaphic
Apparent bulk density reference in surface soil	1 Peaty horizons, 2 Volcanic soil horizons, 3 Clay horizons with structure	Edaphic
Apparent bulk density reference in subsoil	1 Peaty horizons, 2 Volcanic soil horizons, 3 Clay horizons with structure	Edaphic
Saturation of bases in surface soil	1 Very acidic soil, 2 Medium soil, 3 Soil saturated in bases	Edaphic
Sand content of soil,	%	Edaphic
Sand content of subsoil	%	Edaphic
Gravel content of subsoil	%	Edaphic

* Source for bioclimatic: WorldClim, Available online: http://www.worldclim.org, for geophysical: Shuttle Radar Mission, Available online: http://srtm.csi.cgiar.org (accessed on 4 February 2021), for edaphic: MAGAP, Available online: http://geoportal.magap.gob.ec/geonetwork/srv/spa/main.home. (accessed on 4 February 2021).