

Supplementary of the article

Table S1. Environmental variables affecting the occurrence of landslide disasters

Primary index	Secondary index	Code	spatial resolution
climatic variables	Precipitation in March	prec3	30"
	Precipitation in April	prec4	30"
	Precipitation in May	prec5	30"
	Precipitation in June	prec6	30"
	Precipitation in July	prec7	30"
	Precipitation in August	prec8	30"
Terrain variables	Precipitation in September	prec9	30"
	Elevation	elev	30"
	Slope	slope	30"
	Aspect	aspect	30"
Geological variables	Lithology	lithology	1km
	Distance from fault	dis_fault	1km
Land cover	Land use data for 2020	landuse	30m
	Vegetation cover index in 2019	NDVI	1km

Table S2. Environmental variables affecting the habitat suitability of *Morinda officinalis*

Primary index	Code	Secondary index	Code	Secondary index
Climatic variables	Bio1	Annual average temperature	Bio11	Average temperature of coldest quarter
	Bio2	Monthly mean temperature	Bio12	Average annual precipitation
	Bio3	Isothermality	Bio13	Wettest monthly precipitation
	Bio4	Seasonal variation of temperature	Bio14	The driest monthly precipitation
	Bio5	Maximum temperature in warmest month	Bio15	Seasonal variation of precipitation
	Bio6	Minimum temperature in coldest month	Bio16	Wettest quarterly precipitation
	Bio7	Annual temperature range	Bio17	Driest quarterly precipitation
	Bio8	Average wettest season temperature	Bio18	Precipitation in the warmest quarter
	Bio9	Driest quarterly mean temperature	Bio19	Coldest seasonal precipitation
	Bio10	Average temperature of the warmest quarter		
Terrain variables	T_gravel	Percentage of aggregate volume in upper soil	S_gravel	Subsoil gravel volume percentage
	T_sand	Upper soil sand content	S_sand	Sediment content in the subsoil
	T_silt	Upper soil silt content	S_silt	Subsoil silt content
	T_clay	Clay content in the upper soil	S_clay	Clay content in the subsoil
	T_usda_tex	Classification of topsoil texture	S_usda_tex	Subsoil texture classification
	T_bulk_density	Topsoil soil bulk density	S_bulk_density	Subsoil bulk density
	T_oc	Topsoil organic carbon content	S_oc	Subsoil organic carbon content
	T_ph_h2o	Topsoil pH	S_ph_h2o	Subsoil pH
	T_cec_clay	Cation exchange capacity of upper	S_cec_clay	Cation exchange capacity of

		cohesive layer soils		the lower cohesive layer soil
	T_cec_soil	Cation exchange capacity of the topsoil	S_cec_soil	Cation exchange capacity of the subsoil
	T_bs	Upper soil base saturation	S_bs	Subsoil base saturation
	T_teb	Exchangeable base of the upper soil	S_teb	Exchangeable base of subsoil
	T_Caco3	Topsoil carbonate or lime content	S_CaCO3	Carbonate or lime content of subsoil
	T_Caso4	Upper soil sulfate content	S_CaSO4	Sulfate content in the subsoil
	T_esp	Topsoil exchangeable sodium salt	S_esp	The subsoil can exchange sodium salts
	T_ece	Topsoil conductivity	S_ece	Conductivity of the subsoil
Geological variables	Aspect	Aspect	Elevation	Elevation
	Slope	Slope		

Note: In soil data, the prefixes T and S indicate the physicochemical properties of the upper soil (0-30cm) and the lower soil (30-100cm), respectively.