

Supplementary Material

Table S1. Mean monthly averages of climate data for the last 50 years.

Climate factors	January	February	March	April	May	June	July	August	September	October	November	December
Mean maximum heat temperature(°C)	8.60	10.4	15.00	20.95	24.60	26.70	28.65	29.20	23.95	19.55	14.75	9.90
Mean minimum temperature(°C)	2.65	4.50	8.15	12.45	16.75	19.80	21.60	21.60	17.90	13.80	8.90	3.90
Mean temperature(°C)	4.95	6.75	11.15	16.25	19.95	22.90	24.70	24.65	20.65	15.95	11.10	6.20
Mean precipitation(mm)	15.70	20.05	41.00	65.10	95.95	127.70	262.25	214.05	111.55	50.60	19.95	7.50
Mean precipitation days(mm)	10.20	11.55	14.15	15.60	16.75	17.60	18.35	17.10	20.15	18.75	11.70	8.75

Table S2. Details of sampling sites. (LS: landslide; NLS: not landslide)

Sites	E (°)	N (°)	Average altitude (m)	Average slope (degree)	Average slope aspect (degree)	Soil type	Soil thickness (cm)	Litters thickness (cm)
LS-1	103.5541	31.1093	1180.09	40.60	104.40	Yellow-brown earths	8.0	2.0
LS-2	103.5572	31.1129	1206.94	19.67	297.67	Yellow-brown earths	15.0	2.0
LS-3	103.5575	31.1177	1305.68	19.50	137.50	Yellow-brown earths	7.5	1.5
LS-4	103.5700	31.1234	1656.57	26.80	275.00	Yellow-brown earths	7.0	1.0
LS-5	103.5764	31.1308	1768.55	14.00	300.00	Yellow-brown earths	10.0	5.0
LS-6	103.5795	31.1545	1854.50	31.80	121.60	Yellow-brown earths	15.0	5.0
LS-7	103.5825	31.1556	1864.78	45.00	310.00	Cinnamon soils	2.0	0
LS-8	103.5857	31.1595	1924.50	22.80	263.00	Cinnamon soils	10.0	3.0
LS-9	103.5871	31.1616	2000.52	39.60	170.20	Cinnamon soils	5.0	1.0
LS-10	103.5849	31.1607	1967.17	25.33	103.67	Cinnamon soils	10.0	3.0
LS-11	103.5706	31.1246	1677.17	17.00	305.00	Cinnamon soils	3.0	1.0
NLS-1	103.5629	31.1225	1588.91	13.50	80.33	Yellow-brown earths	24.0	7.0
NLS-2	103.5683	31.1227	1645.05	20.60	288.50	Yellow-brown earths	23.5	5.0
NLS-3	103.5736	31.1292	1802.08	11.00	117.50	Yellow-brown earths	21.0	6.0
NLS-4	103.5770	31.1379	1832.37	27.50	100.50	Yellow-brown earths	18.5	5.5
NLS-5	103.3795	31.1462	1829.35	32.33	253.00	Cinnamon soils	33.0	6.0

Table S3 Abbreviations of this study.

Subject	Abbreviations	Units	Meanings
Founctional traits	SLA	$\text{cm}^2 \cdot \text{g}^{-1}$	Specific leaf area
	LDMC	$\text{mg} \cdot \text{g}^{-1}$	Leaf dry matter content
	SDY	$\text{g} \cdot \text{cm}^{-3}$	Stem density
	LT	mm	Leaf thickness
	APH	cm	Average plant height
	CD	cm	Crown diameter
	TKW	g	Thousand kernel weight
Ecological scales	WFT	-	Woody plant functional types
	LoN	-	Landslides or not
	Sit	-	Sample sites
	SPP	-	Species
Enviromentall factors of landslides	ATT	m	Altitude
	SLO	degree	Slope
	ASP	-	Transformation of slope aspect
	LIT	cm	Average litter thinkness
	S-w	m	Width of landslide mass
	SOC	g/kg	Soil organic carbon
	STN	g/kg	Soil total nitrogen
	S-ty	-	Soil type
	S-th	cm	Soil thickness
	SP-Q	-	Species quantity
	Co-H	%	Herb coverage

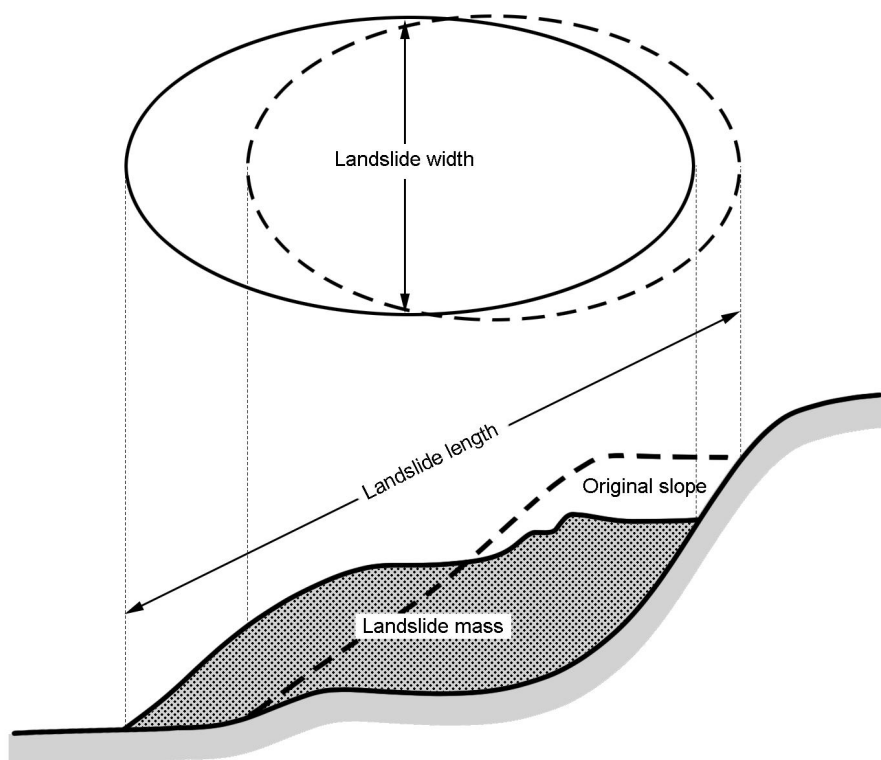


Figure S1. Schematic diagram of landslide mass structure.

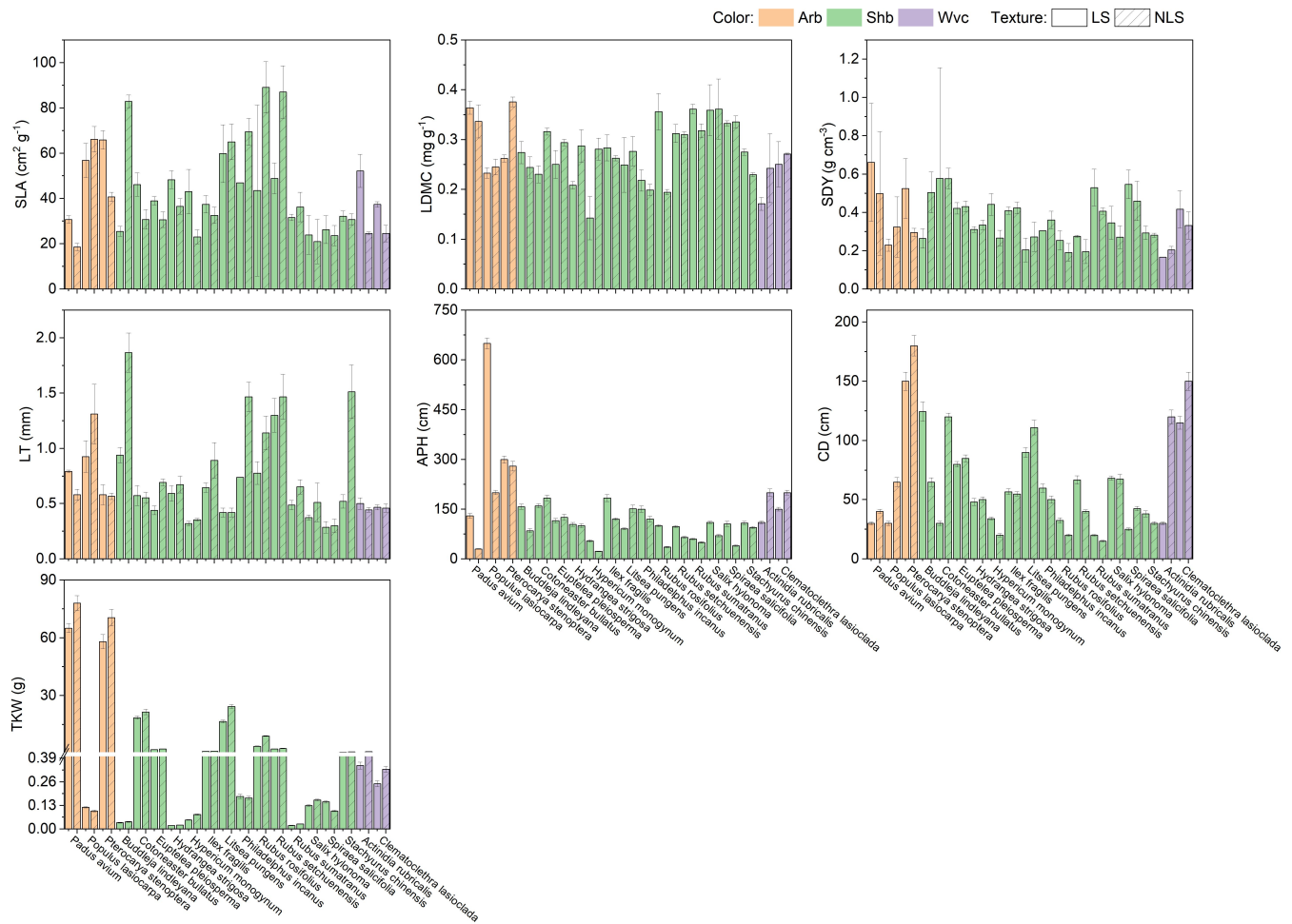


Figure S2. Functional traits of share species in both landslide and not-landslide area.

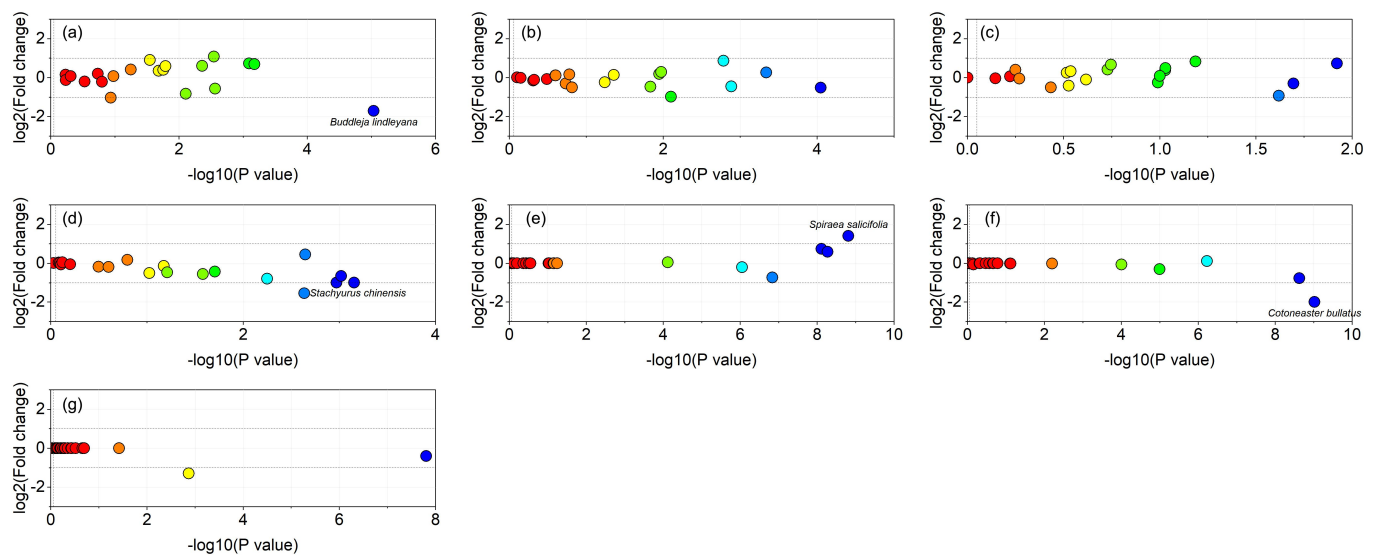


Figure S3. Key species of difference in functional traits between landslide and not-landslide.

Table S4. One-way variance analysis of woody plant functional traits between WFTs on landslide and not-landslide. SLA, specific leaf area; LDMC, leaf dry matter content; ; SDY, stem density; LT, leaf thickness; APH, average plant height; CD, crown diameter; TKW, thousand kernel weight.

Type	Functional traits	Arbor	Shrubs and small arbor	Woody vines and climbing shrubs
Landslide	SLA	43.81(±15.58)a	37.27(±13.57)ab	31.07(±15.64)b
	LDMC	0.32(±0.09)a	0.28(±0.06)a	0.28(±0.09)a
	SDY	0.36(±0.15)a	0.33(±0.18)a	0.28(±0.11)a
	LT	0.65(±0.21)a	0.53(±0.26)a	0.48(±0.15)a
	APH	152.5(±99.46)a	112.06(±39.49)b	117.5(±65.19)ab
	CD	60(±54.27)a	57.98(±27.97)a	65.15(±31.81)a
	TKW	37.36(±38.63)a	3.22(±7.32)b	2.24(±2.33)b
	SLA	41.82(±20.85)a	47.18(±28)a	45.68(±37.18)a
Not-landslide	LDMC	0.32(±0.06)a	0.28(±0.06)a	0.29(±0.06)a
	SDY	0.37(±0.2)a	0.35(±0.13)ab	0.25(±0.07)b
	LT	0.82(±0.39)a	1.01(±0.64)a	0.58(±0.23)a
	APH	165(±94.72)a	102.23(±48.59)b	81.98(±58.25)b
	CD	60(±54.27)a	60.01(±29.66)a	49.9(±28.15)a
	TKW	40.38(±35.8)a	4.88(±8.21)b	11.39(±15.5)b