

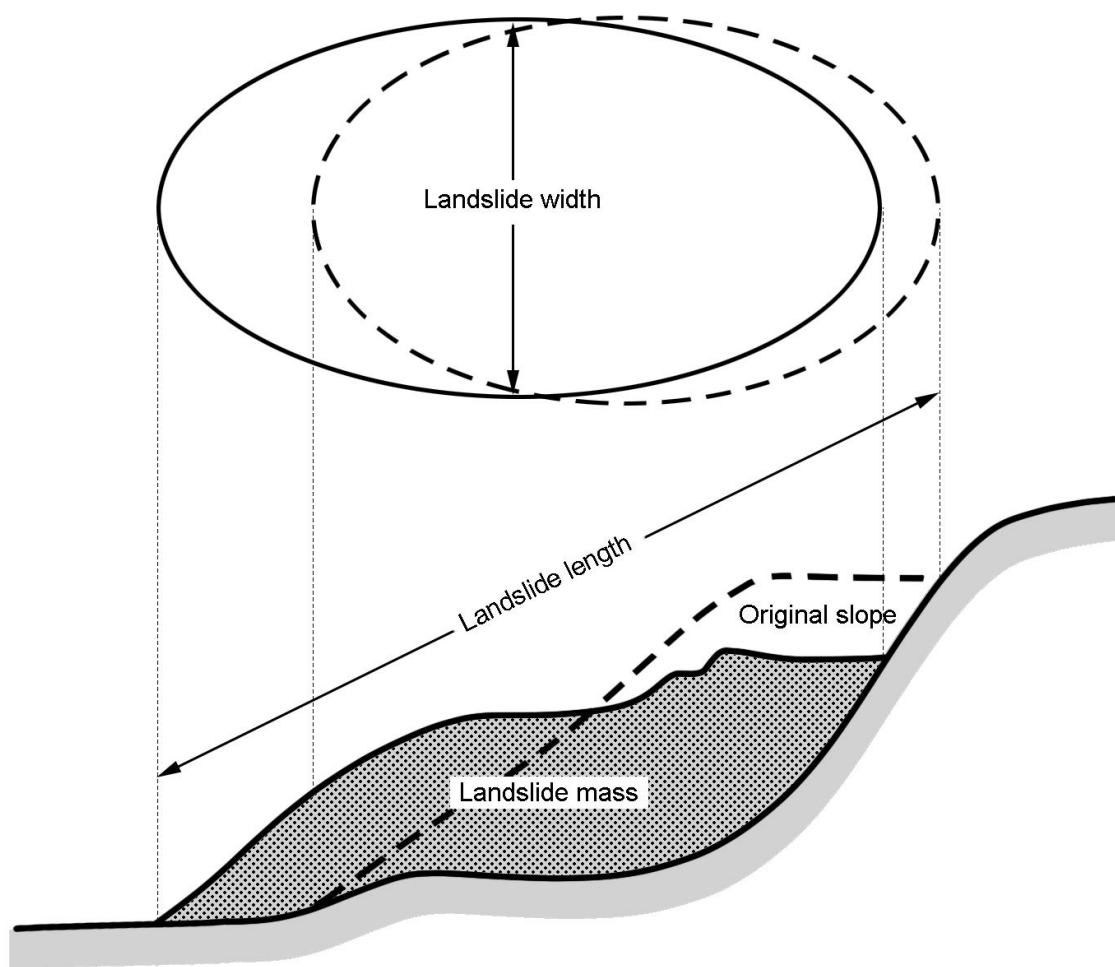


Figure S1. Schematic diagram of landslide mass structure. Landslide length(LML); Landslide width(LMW).



Figure S2. Phylogenetic tree of plants in this study

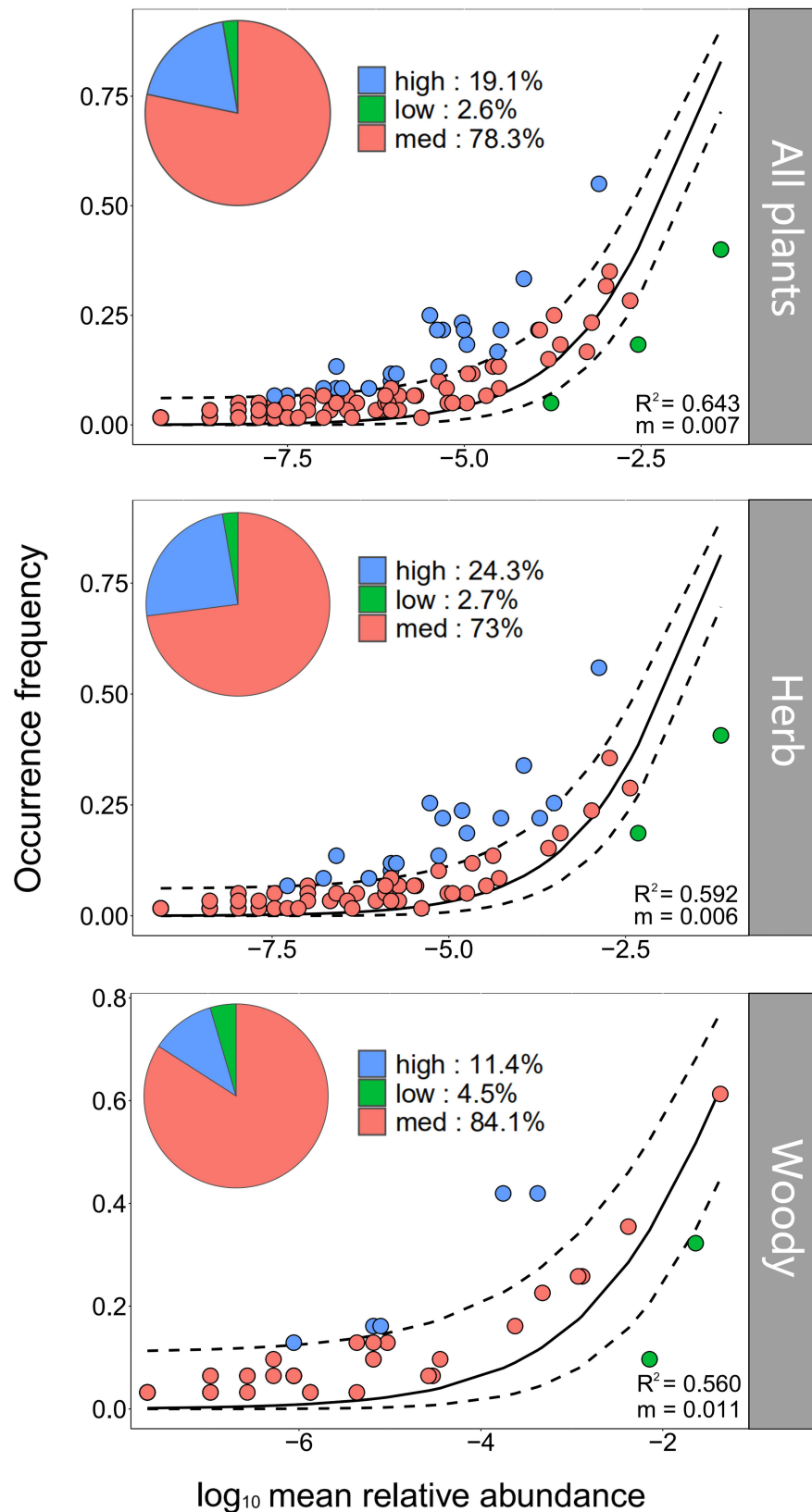


Figure S3. Neutral model applied to assess the effects of random dispersal and ecological drift on the assembly of plant communities on the landslides. R^2 indicates the goodness of fit to the neutral model. m indicates the estimated migration rate. The solid black lines indicate the best fit to the neutral model and dashed black lines represent 95% confidence intervals around the model prediction. The point charts depict the occurrence frequency of the over-represented (blue), neutrally distributed (red) and under-represented (green).

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-a. Details of sampling sites

Sites	E (°)	N (°)	Landslide types	Size of landslides		Tongues	Soil type	Soil thickness (cm)	Litters thickness (cm)
				Width(m)	Length(m)				
1	103.5541	31.1093	vibration-sliding	273.0	154.0	fan-shaped	Yellow-brown earths	8.0	2.0
2	103.5572	31.1129	collapse-sliding	24.7	19.1	carried away by river	Yellow-brown earths	15.0	2.0
3	103.5575	31.1177	vibration-sliding	118.2	90.3	carried away by river	Yellow-brown earths	7.5	1.5
4	103.5700	31.1234	vibration-sliding	29.4	212.5	blunt end	Yellow-brown earths	7.0	1.0
5	103.5764	31.1308	vibration-sliding	318.9	526.3	fan-shaped	Yellow-brown earths	10.0	5.0
6	103.5795	31.1545	vibration-sliding	57.0	96.1	carried away by river	Yellow-brown earths	15.0	5.0
7	103.5825	31.1556	collapse-sliding	15.0	30.0	carried away by river	Cinnamon soils	2.0	0
8	103.5857	31.1595	vibration-sliding	12.0	53.7	carried away by river	Cinnamon soils	10.0	3.0
9	103.5871	31.1616	collapse-sliding	46.8	17.8	carried away by river	Cinnamon soils	5.0	1.0
10	103.5849	31.1607	collapse-sliding	107.6	41.1	carried away by river	Cinnamon soils	10.0	3.0
11	103.5706	31.1246	vibration-sliding	32.2	205.9	blunt end	Cinnamon soils	3.0	1.0
CK1	103.5629	31.1225	-	-	-		Yellow-brown earths	24.0	7.0
CK2	103.5683	31.1227	-	-	-		Yellow-brown earths	23.5	5.0
CK3	103.5736	31.1292	-	-	-		Yellow-brown earths	21.0	6.0
CK4	103.5770	31.1379	-	-	-		Yellow-brown earths	18.5	5.5
CK5	103.3795	31.1462	-	-	-		Cinnamon soils	33.0	6.0

Table S2-b. Details of sampling sites

Sites	Average altitude (m)	Average slope (degree)	Average slope aspect (degree)	Coverage of herbs (%)	Average species quantity pre plots	Soil Water (%)	Soil TN (g·kg ⁻¹)	Soil TOC (g·kg ⁻¹)
1	1180.09	40.60	104.40	90	15.20	5.51	25.76	11.20
2	1206.94	19.67	297.67	70	15.00	4.10	13.31	16.62
3	1305.68	19.50	137.50	90	14.00	4.57	13.88	14.43
4	1656.57	26.80	275.00	80	14.40	7.58	14.17	17.40
5	1768.55	14.00	300.00	90	11.00	3.46	22.89	13.78
6	1854.50	31.80	121.60	100	8.80	11.30	27.12	42.31
7	1864.78	45.00	310.00	10	3.00	3.86	12.33	12.50
8	1924.50	22.80	263.00	90	10.80	10.98	26.08	32.24
9	2000.52	39.60	170.20	80	9.40	17.60	27.41	53.65
10	1967.17	25.33	103.67	100	8.17	7.87	27.32	22.49
11	1677.17	17.00	305.00	90	14.80	3.16	28.11	22.78
CK1	1588.91	13.50	80.33	70	25.0	16.23	27.65	59.51
CK2	1645.05	20.60	288.50	50	26.4	19.30	28.83	92.23
CK3	1802.08	11.00	117.50	40	30.2	15.82	32.21	69.14
CK4	1832.37	27.50	100.50	70	23.6	17.90	31.52	78.66
CK5	1829.35	32.33	253.00	60	27.0	21.75	29.37	93.72

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
	SRL	$\text{cm} \cdot \text{g}^{-1}$	specific root length
	LT	mm	leaf thickness
	APH	cm	average plant height
	CD	cm	crown diameter
	TKW	g	thousand kernel weight
Alpha diversity indexes	d-Ma	-	species richness index
	Dr	-	Simpson index
	He	-	Shannon index
	Je	-	Pielou index
Geographical factors of landslides	ATT	m	altitude
	SLO	degree	slope
	TRASP	-	transformation of aspect
	LML	m	length of landslide mass
	LMW	m	width of landslide mass