

Supplementary Material

Fig. S1 - Location of Lienhuachih Forest Dynamics Plot. The top left panel shows the plot location (in red) within Taiwan and the broader region.

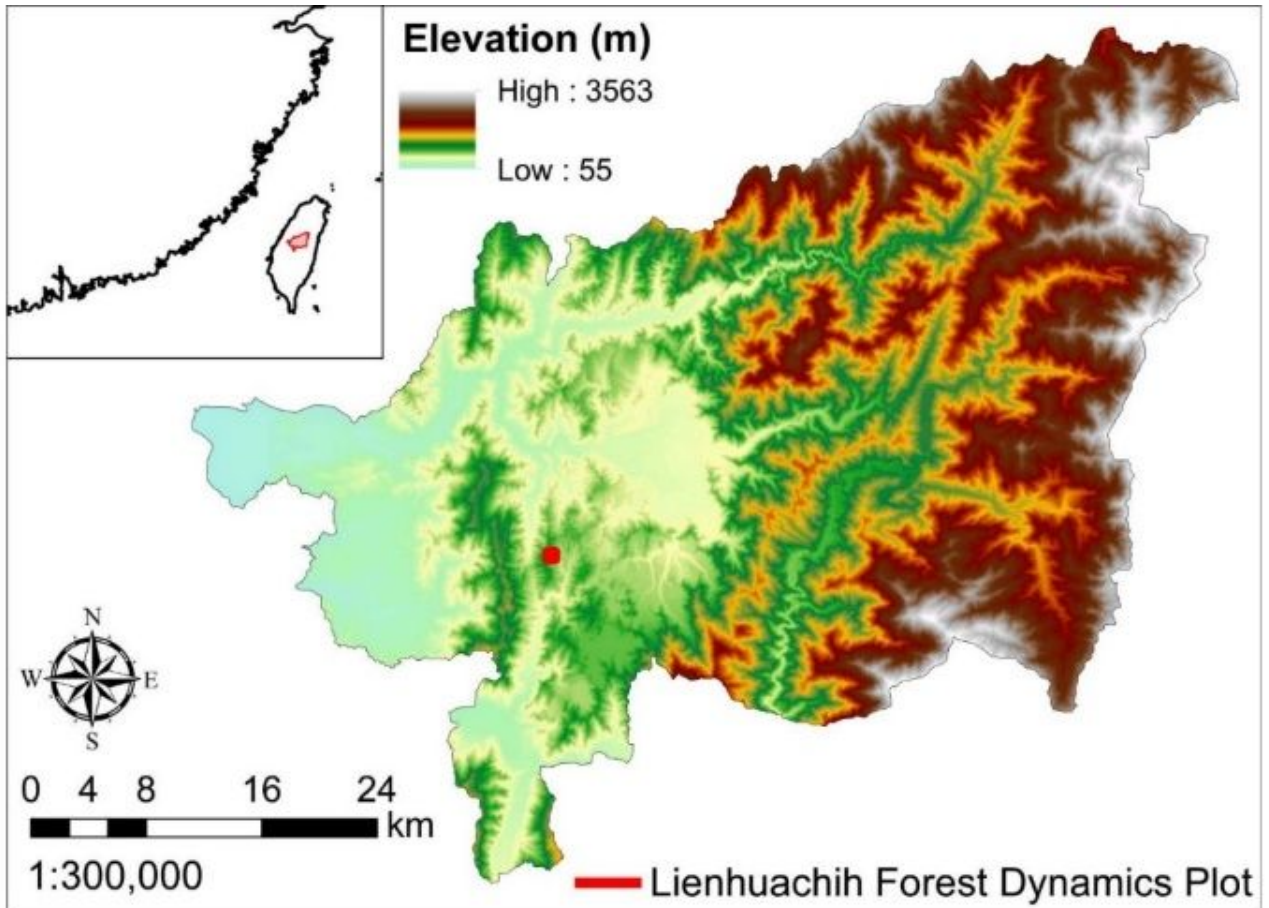


Fig. S2 - Climate diagram of Lienhuachih Forest Dynamics Plot. The blue and red curves present mean monthly precipitation and temperature, respectively. The blue area indicates those months with average monthly precipitation higher than 100 mm. The precipitation curve always lies higher than does the temperature curve, implying that humid conditions prevail throughout the year.

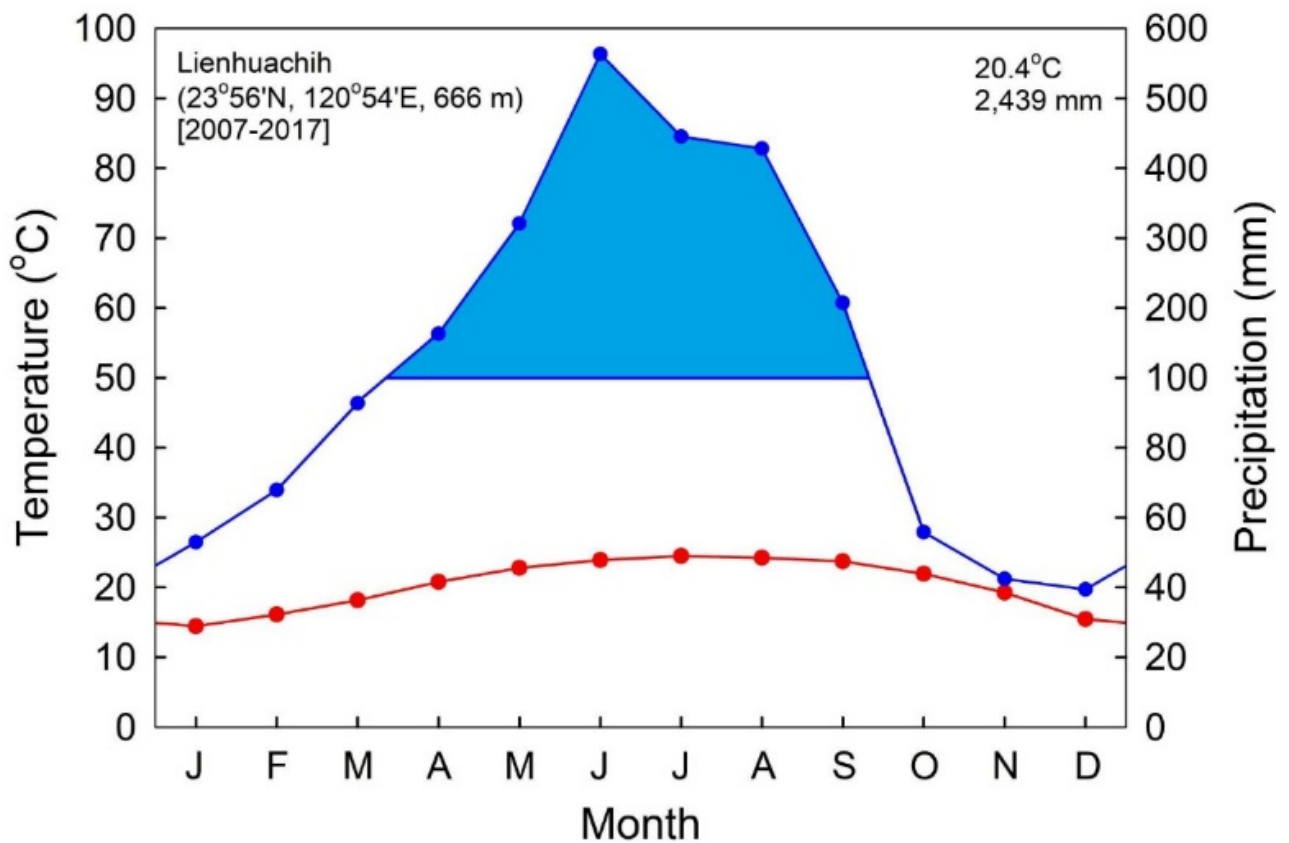


Fig. S3 - DBH class distribution of the pre-landslide tree community in the 25-ha Lienhuachih Forest Dynamics Plot. Note log scale used on y-axis.

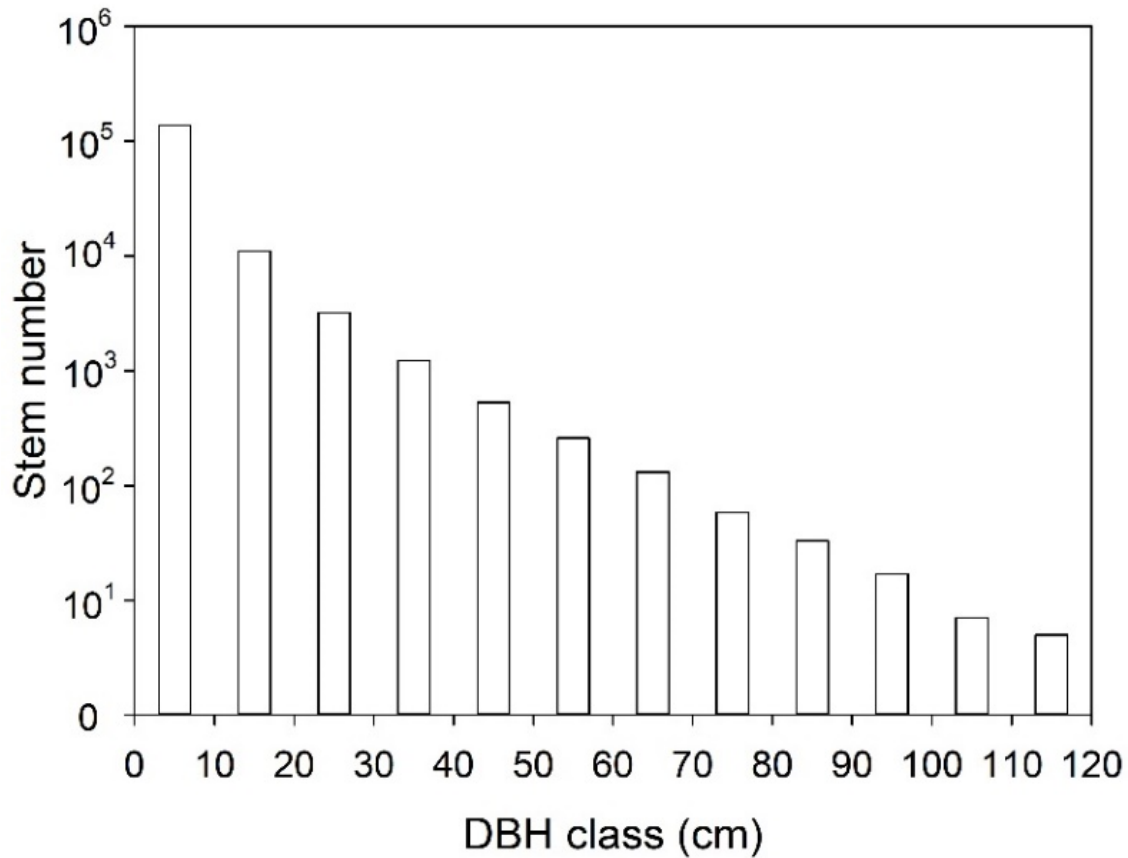


Fig. S4 - DBH class distribution of surviving and missing trees in landslide scarps and large trees within 10 m away from landslide scarps. Note that log scale is used on y-axis, and trees in Landslides B and J in Fig. 3 are excluded.

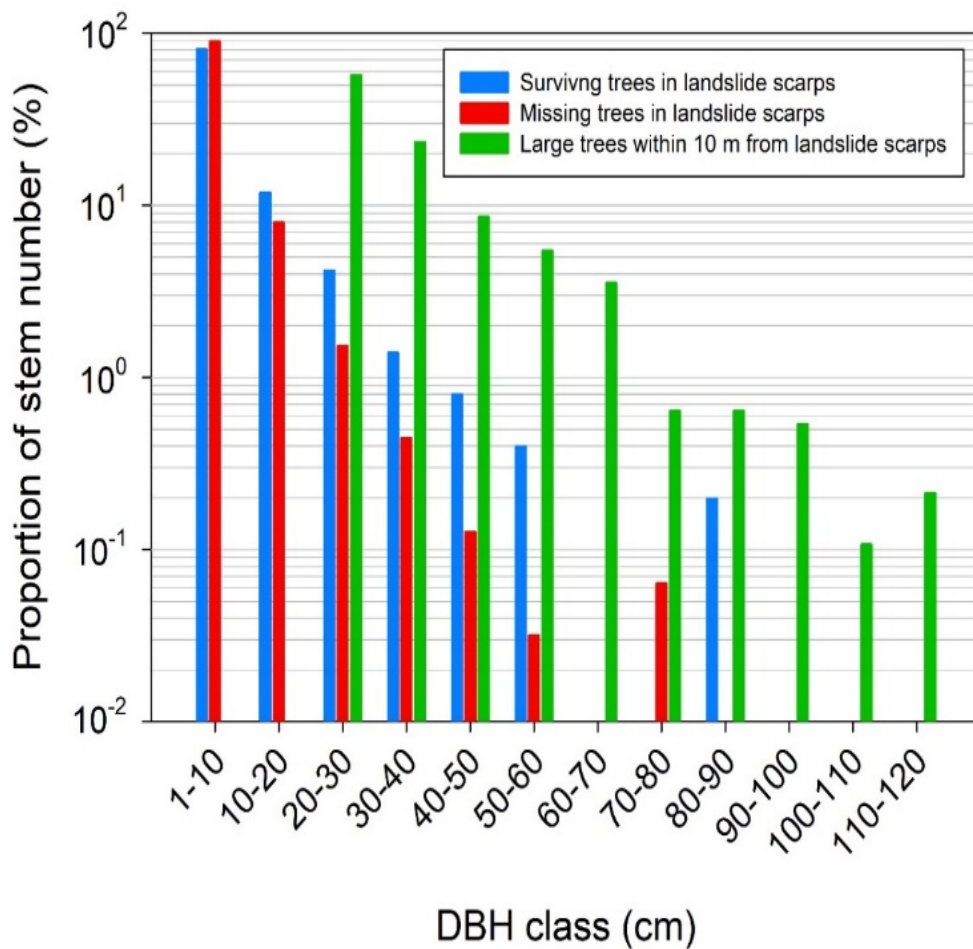
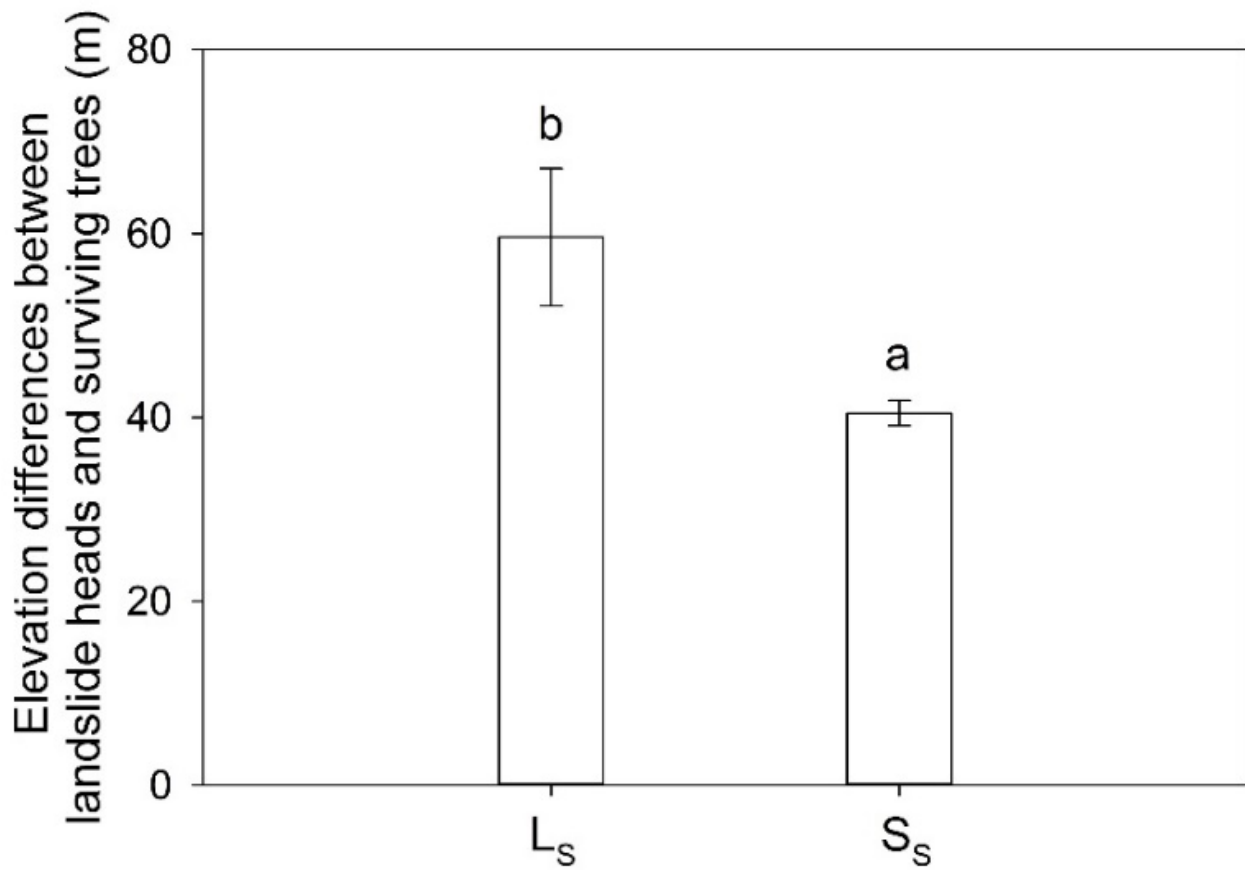


Fig. S5 - Elevation differences between landslide heads and surviving trees, L_s and S_s . Different letters next to bars indicate significant differences ($p < 0.01$, Mann-Whitney test) between groups.



Tab. S1 - Species, stem number and basal area of surviving large trees (L_S), missing large trees (L_M), surviving small trees (S_S), missing small trees (S_M) in landslide scarps and large trees within 10 m from landslide scarps (L_A) in Lienhuachih dynamics forest plot. The total areas of landslide scarps and L_A distribution area are 8,928.14 m² and 13,802.52 m², respectively. Note that trees in Landslides B and J in Fig. 3 are excluded.

Species	L_S		L_M		S_S		S_M		L_A	
	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)
<i>Adinandra formosana</i>							4	0.0043		
<i>Antidesma japonicum</i> var. <i>acutisepalum</i>							1	0.0007		
<i>Archidendron lucidum</i>							1	0.0025	1	0.1359
<i>Ardisia cornudentata</i> subsp. <i>morrisonensi</i>							3	0.0012		
<i>Ardisia quinquegona</i>					9	0.0108	61	0.2075	1	0.1963
<i>Ardisia sieboldii</i>			2	0.9552	3	0.0031	21	0.1994	12	2.8914
<i>Ardisia virens</i>							1	0.0043		
<i>Beilschmiedia erythrophloia</i>							9	0.0455	4	1.9351
<i>Bischofia javanica</i>							1	0.0006		
<i>Blastus cochinchinensis</i>					61	0.0601	571	0.49		
<i>Bridelia tomentosa</i>	1	0.4231								
<i>Callicarpa formosana</i>							1	0.0005		
<i>Callicarpa kochiana</i>					8	0.0265	47	0.1406		
<i>Camellia furfuracea</i>					1	0.002				
<i>Camellia nokoensis</i>					3	0.0063	5	0.0074		
<i>Castanopsis cuspidate</i> var. <i>carlesii</i>									12	5.6164
<i>Castanopsis fargesii</i>	1	0.9059	1	0.2307	2	0.0017	7	0.2057	34	19.2079
<i>Castanopsis kawakamii</i>			1	0.2157			1	0.0353	11	8.5474
<i>Cinnamomum camphora</i>									4	8.4328
<i>Cinnamomum micranthum</i>			1	0.298			2	0.0839	10	7.511
<i>Cinnamomum subavenium</i>	1	0.2552	2	0.5578	6	0.1376	34	0.4692	37	10.1368

Species	LS		LM		SS		SM		LA	
	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)
<i>Clerodendrum cyrtophyllum</i>					1	0.001	26	0.0407		
<i>Clerodendrum trichotomum</i>							1	0.0005		
<i>Cryptocarya chinensis</i>	2	0.6165	6	1.7051	18	0.5744	172	1.8767	97	32.2117
<i>Cyclobalanopsis pachyloma</i>					4	0.0165	26	0.2724	30	7.2956
<i>Diospyros morrisiana</i>			2	0.3733	4	0.0508	77	1.0177	36	8.4025
<i>Distyliopsis dunnii</i>					3	0.0025	3	0.073	3	0.5182
<i>Ehretia longiflora</i>									3	1.6764
<i>Elaeocarpus japonicus</i>							5	0.1629	3	0.462
<i>Elaeocarpus sylvestris</i>							10	0.2247		
<i>Engelhardia roxburghiana</i>					2	0.0044	17	0.2913	71	28.2103
<i>Euonymus laxiflorus</i>					6	0.007	47	0.0691		
<i>Eurya loquaiana</i>							16	0.0471		
<i>Eustigma oblongifolium</i>					2	0.0073	11	0.1822		
<i>Ficus fistulosa</i>	3	0.5986	5	0.7924	28	0.6035	171	1.4412	6	1.5037
<i>Ficus nervosa</i>					6	0.1126	19	0.4456	7	8.8928
<i>Gardenia jasminoides</i>					1	0.0023	3	0.0077		
<i>Glochidion acuminatum</i>	1	0.229	6	1.0487	20	0.3972	58	0.7654	32	6.9629
<i>Glycosmis citrifolia</i>					2	0.0024	23	0.0546		
<i>Gordonia axillaris</i>					10	0.4061	23	0.515	13	3.5404
<i>Helicia cochinchinensis</i>							2	0.0181		
<i>Helicia formosana</i>					44	0.4473	184	1.1132	4	0.7972
<i>Helicia renetiensis</i>					3	0.0046	29	0.2173		
<i>Ilex ficoidea</i>					2	0.0125	16	0.1154	3	0.4762
<i>Ilex formosana</i>			2	0.3796	4	0.0502	13	0.2546	6	1.0344
<i>Ilex goshiensis</i>					5	0.0073	14	0.0224		
<i>Ilex lonicerifolia</i>							4	0.0055		
<i>Ilex micrococca</i>							1	0.1134		
<i>Ilex pubescens</i>					1	0.0004	4	0.0041		

Species	L _S		L _M		S _S		S _M		L _A	
	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)
<i>Illicium arborescens</i>					4	0.0799	12	0.5325	9	2.1328
<i>Lagerstroemia subcostata</i>							1	0.0929	3	1.5723
<i>Lasianthus cyanocarpus</i>							1	0.0005		
<i>Lasianthus fordii</i>					2	0.0012	23	0.0123		
<i>Lasianthus microstachys</i>							1	0.0006		
<i>Limlia uraiana</i>			1	0.1932	1	0.0005	5	0.1969	6	1.5893
<i>Lindera communis</i>							1	0.0716	3	0.8675
<i>Lithocarpus amygdalifolius</i>									6	2.3953
<i>Litsea acuminata</i>					5	0.0415	26	0.2964	25	7.1924
<i>Litsea cubeba</i>							7	0.0715		
<i>Machilus japonica var. kusanoi</i>			1	1.6742	6	0.0138	12	0.1321	16	17.2027
<i>Machilus thunbergii</i>	1	0.3278	3	0.9543	2	0.0072	4	0.0464	12	4.0694
<i>Machilus zuihoensis</i>			3	0.5858	6	0.0745	41	0.6304	32	19.8224
<i>Maesa perlaria var. formosana</i>					3	0.0015	15	0.0113		
<i>Mallotus paniculatus</i>	3	0.9041	7	1.633	24	0.602	303	2.8744	73	15.1019
<i>Mallotus philippensis</i>							2	0.0073		
<i>Melastoma candidum</i>							6	0.0024		
<i>Melicope pteleifolia</i>					2	0.0014	25	0.1335		
<i>Meliosma squamulata</i>	1	0.1425	1	0.1917			2	0.0144	6	1.3556
<i>Michelia compressa</i>					5	0.0265	5	0.085	9	3.7317
<i>Neolitsea aciculata</i>	1	0.1333			2	0.0019	35	0.1524		
<i>Neolitsea konishii</i>			4	1.5928			4	0.067	21	8.7545
<i>Ormosia formosana</i>					3	0.008	32	0.2508	15	5.3397
<i>Osmanthus matsumuranus</i>					1	0.0013	1	0.0005		
<i>Pasania hancei var. ternaticupula</i>							1	0.0028		
<i>Pasania harlandii</i>					1	0.0018	3	0.1196	16	4.1318
<i>Pasania konishii</i>					2	0.0089	14	0.1602	1	0.1307
<i>Pasania nantoensis</i>							1	0.0642	22	19.477

Species	L _S		L _M		S _S		S _M		L _A	
	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)
<i>Pasania synbalanos</i>					1	0.0045	8	0.277	1	0.178
<i>Podocarpus nakaii</i>					1	0.0755	18	0.2618	2	0.4549
<i>Prunus mume</i>							1	0.034		
<i>Prunus phaeosticta</i>					1	0.0004	5	0.0188		
<i>Psychotria rubra</i>					11	0.0274	74	0.1338		
<i>Pyrenaria shinkoensis</i>			1	0.298						
<i>Randia cochinchinensis</i>					14	0.0494	114	0.5008		
<i>Rhaphiolepis indica var. tashiroi</i>							1	0.002		
<i>Rhododendron mariesii</i>									1	0.1466
<i>Mallotus philippensis</i>							2	0.0073		
<i>Melastoma candidum</i>							6	0.0024		
<i>Melicope pteleifolia</i>					2	0.0014	25	0.1335		
<i>Meliosma squamulata</i>	1	0.1425	1	0.1917			2	0.0144	6	1.3556
<i>Michelia compressa</i>					5	0.0265	5	0.085	9	3.7317
<i>Neolitsea aciculata</i>	1	0.1333			2	0.0019	35	0.1524		
<i>Neolitsea konishii</i>			4	1.5928			4	0.067	21	8.7545
<i>Ormosia formosana</i>					3	0.008	32	0.2508	15	5.3397
<i>Osmanthus matsumuranus</i>					1	0.0013	1	0.0005		
<i>Pasania hancei var. ternaticupula</i>							1	0.0028		
<i>Pasania harlandii</i>					1	0.0018	3	0.1196	16	4.1318
<i>Pasania konishii</i>					2	0.0089	14	0.1602	1	0.1307
<i>Pasania nantoensis</i>							1	0.0642	22	19.477
<i>Pasania synbalanos</i>					1	0.0045	8	0.277	1	0.178
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<i>Psychotria rubra</i>					11	0.0274	74	0.1338		
<i>Pyrenaria shinkoensis</i>			1	0.298						
<i>Randia cochinchinensis</i>					14	0.0494	114	0.5008		

Species	L _S		L _M		S _S		S _M		L _A	
	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)	Stem number	Basal area (m ²)
<i>Rhaphiolepis indica</i> <i>var. tashiroi</i>							1	0.002		
<i>Rhododendron</i> <i>mariesii</i>									1	0.1466