

## Supplementary Material

Table S1

Number	Land use types	Geographical coordinates	Vegetation types	Slope position	Altitude/m	Sand/%	Silt/%	Clay/%
1	SF	26°51'19.0"N, 104°18'21.1"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2295	36.26	53.43	8.55
2	SF	26°51'21.7"N, 104°18'19.7"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2292	35.93	51.20	12.80
3	SF	26°51'24.5"N, 104°18'18.4"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2291	28.00	59.82	10.68
4	SF	26°51'25.9"N, 104°18'15.5"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2294	21.17	53.40	23.50
5	SF	26°51'28.2"N, 104°18'10.7"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2268	15.82	55.59	25.66
6	GL	26°51'30.4"N, 104°18'08.3"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Upper slope	2289	13.47	49.34	36.47
7	SF	26°51'32.8"N, 104°18'03.7"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2300	10.00	60.13	32.21
8	SF	26°51'31.2"N, 104°18'00.6"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2308	8.83	57.94	30.04
9	AFL	26°51'28.6"N, 104°18'00.4"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Upper slope	2287	10.32	62.54	25.88
10	SL	26°51'16.3"N, 104°18'13.1"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2290	14.35	47.33	36.58
11	SL	26°51'18.8"N, 104°18'10.3"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2274	6.74	66.52	25.75

12	SF	26°51'25.9"N, 104°18'02.5"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2273	23.71	62.47	12.92
13	SF	26°51'27.1"N, 104°18'00.1"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2273	14.09	70.70	15.00
14	SF	26°51'28.8"N, 104°17'58.0"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2272	11.58	49.21	38.51
15	SF	26°51'17.9"N, 104°18'04.1"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2268	7.76	51.32	40.62
16	GL	26°51'25.3"N, 104°17'55.0"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2258	16.70	51.08	31.92
17	GL	26°51'13.4"N, 104°18'04.6"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2251	7.49	62.61	25.91
18	GL	26°51'06.5"N, 104°18'08.3"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2255	11.97	58.18	25.86
19	GL	26°51'13.4"N, 104°18'20.3"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2258	11.88	58.24	25.88
20	SL	26°51'10.8"N, 104°18'21.4"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Lower slope	2267	14.37	66.99	12.97
21	GL	26°51'06.8"N, 104°18'22.0"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2249	20.46	58.27	17.27
22	GL	26°51'04.8"N, 104°18'19.2"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Middle slope	2250	18.54	58.09	19.36
23	SL	26°51'04.2"N, 104°18'15.6"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2253	22.97	49.41	23.63
24	AFL	26°51'07.3"N, 104°18'17.8"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Middle slope	2260	26.55	56.41	13.04
25	AFL	26°51'20.7"N, 104°18'04.2"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Upper slope	2269	40.08	37.88	21.04
26	SF	26°51'11.0"N, 104°18'15.5"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Upper slope	2272	19.08	63.09	16.83

27	SF	26°51'07.9"N, 104°18'14.1"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2267	12.82	54.63	31.52
28	SL	26°51'05.8"N, 104°18'12.3"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2263	17.25	69.39	12.62
29	AFL	26°51'08.2"N, 104°18'09.6"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Upper slope	2275	15.22	58.85	24.89
30	AFL	26°51'10.9"N, 104°18'11.6"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Upper slope	2280	19.84	73.49	6.30
31	AFL	26°51'18.6"N, 104°18'08.4"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Upper slope	2290	13.49	60.13	26.01
32	SL	26°51'19.7"N, 104°18'02.1"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2265	24.10	47.90	27.76
33	SL	26°51'23.0"N, 104°17'53.8"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2261	20.92	63.26	15.32
34	SL	26°51'22.1"N, 104°17'57.8"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2257	20.70	59.25	19.53
35	SF	26°51'20.1"N, 104°17'59.9"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Lower slope	2247	25.07	52.47	21.95
36	SF	26°51'11.3"N, 104°18'05.1"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2271	19.38	63.90	16.22
37	AFL	26°51'17.9"N, 104°17'55.0"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Middle slope	2271	33.48	58.57	7.45
38	SF	26°51'15.5"N, 104°17'57.6"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2270	36.58	52.06	9.51
39	SL	26°51'14.8"N, 104°17'58.7"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2264	33.47	53.91	11.57
40	SL	26°51'10.9"N, 104°18'01.9"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Lower slope	2252	30.15	55.37	13.29
41	GL	26°51'08.9"N, 104°18'04.2"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2257	20.10	63.61	15.68

42	SL	26°51'06.7"N, 104°18'05.6"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Lower slope	2262	24.63	61.79	13.19
43	SL	26°51'28.0"N, 104°18'04.1"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Lower slope	2249	15.85	62.26	20.59
44	SL	26°51'25.5"N, 104°18'05.6"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Lower slope	2244	17.48	67.65	14.07
45	AFL	26°51'23.1"N, 104°18'08.7"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii Franch</i> )	Lower slope	2250	21.65	60.12	18.04
46	SL	26°51'20.8"N, 104°18'12.6"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2272	22.59	58.10	17.64
47	AFL	26°51'18.8"N, 104°18'15.7"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii Franch</i> )	Upper slope	2266	23.96	61.06	14.72
48	SF	26°51'15.9"N, 104°18'18.1"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Lower slope	2239	24.90	61.47	13.56
49	SF	26°51'10.8"N, 104°18'17.4"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2240	23.62	62.73	13.46
50	AFL	26°51'12.3"N, 104°18'17.3"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii Franch</i> )	Upper slope	2258	24.72	62.89	11.66
51	SF	26°51'13.8"N, 104°18'14.5"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Lower slope	2225	26.65	59.74	12.36
52	SF	26°51'20.6"N, 104°18'07.9"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Lower slope	2227	27.46	60.75	11.42
53	SL	26°51'23.8"N, 104°18'05.1"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Lower slope	2233	26.02	60.51	12.02
54	SL	26°51'26.8"N, 104°17'53.3"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2246	25.26	61.97	10.83
55	SL	26°51'25.3"N, 104°17'59.4"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Upper slope	2248	21.32	67.44	10.82
56	AFL	26°51'23.3"N, 104°18'02.9"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii Franch</i> )	Middle slope	2230	24.53	61.10	13.71

57	SL	26°51'13.2"N, 104°18'06.9"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2232	21.32	64.56	13.62
58	GL	26°51'16.2"N, 104°18'08.7"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2213	26.72	61.43	11.55
59	GL	26°51'15.2"N, 104°18'11.1"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Middle slope	2220	10.94	62.56	26.10
60	GL	26°51'12.8"N, 104°18'14.4"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Middle slope	2227	9.87	61.21	28.42
61	SL	26°51'15.3"N, 104°18'06.3"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Middle slope	2217	10.17	65.95	23.08
62	SF	26°51'23.2"N, 104°17'57.9"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Middle slope	2214	14.97	61.00	23.13
63	SF	26°51'16.5"N, 104°18'01.6"E	Maize ( <i>Zea mays</i> ) and potato ( <i>Solanum tuberosum</i> )	Lower slope	2210	17.68	49.86	31.46
64	GL	26°51'11.5"N, 104°18'08.3"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2212	12.07	50.92	35.59
65	GL	26°51'08.6"N, 104°18'06.9"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2216	9.70	56.05	32.44
66	GL	26°51'12.7"N, 104°18'01.7"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2215	29.58	54.70	13.91
67	GL	26°51'15.6"N, 104°17'59.5"E	Ryegrass ( <i>Lolium perenne</i> L.) and alfalfa ( <i>Medicago sativa</i> )	Lower slope	2211	23.57	60.84	13.99
68	SL	26°51'18.7"N, 104°17'58.6"E	Firethorn ( <i>Pyracantha fortuneana</i> ) and huckleberry ( <i>E. pungens</i> )	Lower slope	2210	25.02	56.31	17.17
69	AFL	26°51'19.5"N, 104°17'56.8"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Middle slope	2229	6.94	64.03	27.48
70	AFL	26°51'04.1"N, 104°18'09.0"E	Yunnan Pine ( <i>Pinus Yunnanensis</i> ) and Huashan Pine ( <i>Pinus armandii</i> Franch)	Upper slope	2242	4.70	62.60	31.32

Note: AFL, artificial forest land; SL, shrubland; SF, sloping farmland; GL, grassland.