



Figure S1. Sampling location of 29 populations (villages) of Tartary buckwheat (*Fagopyrum tataricum*) landraces, in Meigu and Zhaojue county of Sichuan Province, China

Table S1 Information of 80 primers

No.	Forward Primer	Reverse Primer
P1	TTTCTGTCCTGGACTTGGTAA	CCCTTTCACCTTCAACGTCT
P2	TCCTAGCCTCTTAGGTTAAGG	TTCTAACCGATGTCAAACCAC
P3	ATCCACATTGACATAGCCAGA	GATTATTAGTCCACCCACCCT
P4	TCCAATAGCCAATAGTACATG	GACCTAATTAACCGTTAGCACA
P5	CAAAAGAAAAGTGCCGAAGT	TTATGTCACCGCCATTGTT
P6	GGTATGACACTTTGCGGTATT	GTATCGACAAGAAACATCCAGA
P7	CAATGGGATCGATTCAGGAC	GAATGAGAATGGGAATGGGA
P8	AAAGAGGTGGATGGGAGCTT	CAGAGAATTGGCGGAAAGAG
P9	TCAGCTTGACATTTGCGTT	GGATGACGTCCGTAACCTGGG
P10	GGGTCAAAACGTTGAGTCGT	CACCCACGGATGTGACATAA
P11	GGACCCTAGTAGGACGGCTT	TGACTCTCCATCCATGCTTGT
P12	GAACCTGTAGGCCTTTTGCG	AAACCAGCTGGAGCAAGAGA
P13	CTCAAAGGATGCCATTGTAAC	GACCTTGAGAACGCCTTGAC
P14	CCACTGGAACGTGTGCTAAG	GGGGAAACTATTTGGTGCAA
P15	CACCTGCTACAATACTCTCA	GCTTAATCAACAGTAGGCAC

P16	GGGCATCAAAGTTGAATACG	GTCTAAGGTCGCACATTGAT
P17	CAATGTTTTTCGCAGTCATGT	TGCGGTGTTTCAAAGTATTG
P18	ATAAACAGTAACCGCCATCT	TTAATCAGACCTAGCCCCAT
P19	TAAGCAAAATGAGATGGTGGT	ATAGCTCTGAGAAGCCGAAG
P20	AGCATTGAGCCTAAACATGA	CAAAACGCCTGATTTCTAC
P21	CAGTGCCGTCAGTAGTTC	GAGCTTATTGGACTCGCTTG
P22	GTAGGAGGGTTGTATTGTGG	ATTTCTCTTCACACGAGCTT
P23	ATCTTTCTGTCCTGGACTTGGT	GCAAGAAAAACAGGGGAGCA
P24	GCCTCCTACTAGCCCTTCCA	AGCTGACCCTTGTGTCTCCC
P25	GTTGGCTGACGAAGACCGAC	AAAGAGAGCGAGAGGCACTG
P26	ACCGAGATAGAGACCGAGAT	CAAATAACATACCCAAAGA
P27	GACCCTTCGTTAGTAGACCA	GGAGGAAGAGAAGAGAAAGT
P28	GGGTGGTCCTATTTACCGATTTA T	TTGAGGGTTAGGTGATCTTGCTT
P29	GGGGATTGATCGAGAAAG	CCGAAGAGTAACTAGGAC
P30	TGCCGTTTCGTGTCGTAATTCAGC	TTGTCACCGTCATTGTGAGTCCA
P31	TCGGGGCCACAAGTCAATAC	TCTGGATAAGGGTTGGGGGT
P32	GTTACGGAGGAGCGGAAGAG	GGCTATGAGCATTATTTTGGTGGA
P33	AGTTCACGTGAGATCCTAGTGT	CAACAGGGGAGAATGACGCT
P34	CTTGCCCAGAGCCAAGGTAT	AGCAAAACCTATGCTTTTACTGC
P35	TTGATGGACACTAGGCAAGGT	GTGAGGAGCAATTGGCGTTT
P36	GGCCTCCTTGAACAGCTAGA	GCAGTGACCGAAGTGCAGAT
P37	TGAGCGGCAATGCATCTGTA	AGGAGAGAGCGCGAAAAACA
P38	AATGGCGGCAAATCTCGCTA	TGAGGATTTAGGGGCTTGG
P39	GATCACGGTCACCATCACGA	CAAGAGCGAGCATCCCAGAG
P40	GGTTGTGGTTTCCTGACGTTG	CCGTAACCCCAGTTCGTAGT
P41	ATCCGAAACCGCCTCCTTAC	GGGGTTTGGTGCAGGTACT
P42	TCGGGGCCACAAGTCAATAC	TCTGGATAAGGGTTGGGGGT
P43	CTTGCCCAGAGCCAAGGTAT	AGCAAAACCTATGCTTTTACTGC
P44	GAGAGATGAGCACAGCGTCA	TCGATGGCGAAACCCAAGTT

P45	ACCTGCAAAGCAACCTAGTGA	GCCCCAATCGAAGTTTCACC
P46	TTGATGGACACTAGGCAAGGT	GTGAGGAGCAATTGGCGTTT
P47	TTTTCCACCTCAGAGGGCAG	TTGCACATTGTCGTTTCCCA
P48	GGGAATCCTCCACCGTTGAT	TCCTGAAGCCGAGTCTCCTA
P49	ATGAGTGCACCACATCCACC	ATTGCAGCATTAGGAGGCGG
P50	GGCCTCCTTGAACAGCTAGA	GCAGTGACCGAAGTGCAGAT
P51	AAGACAGTGGTGGTAGTGGC	TAGAGGAAAGTAGTGCGGCG
P52	GAATCCACCATCACCAGGCA	GTTTTCGATGCCAACTGCGA
P53	GGTTGTGGTTTCCTGACGTTG	CCGTAACCCCAGTTCGTAGT
P54	TGAGTAATTGAAAATGGAGATCGAC	TACTCCCAACCAGCAATCCG
P55	ATGCTTGGGACATTTGACACATT	CGAGTCTAAAGCCAACTGGGA
P56	CAGAACGTGATCCCCGACTT	CTGCATAGGATCGCAGTGGT
P57	GGGAACAACCAATGGCCTCA	TGCATATCCGGATCCTCCCT
P58	GACACAAGTCGTTCCAACCA	GTGTGTGACTGAGCCTTCCA
P59	ACCGCGTAACCCCAATTATGT	AGGATCTTGCAATATTTTCATCCTGT
P60	TGCACCTTCCATCATGAACGT	ACTACTAACCTAGCAAATGTCA
P61	TCACCCCTCTCACACAATGC	GTCAACAAAGTCGGCTGCAG
P62	TGTCAAATACAATTGCAAGGCGT	TGTCATCGACTAACGGCCAT
P63	CCCCCTTCTAAACACGTGGA	TTGAAAATGCCCCTTAAGTTGTT
P64	TTCGATCAAAGGTTTATTGTCTCTT	CACGATCGCGCACCTTTTTA
P65	TGACACAAAGAGAACACTCAAGA	TGTCTGTGAGAGAGCGAAACA
P66	TCCCTCACAGCTTGCAAAAA	TGGCCTATGTTAGTCAGGGAC
P67	GGACGTTCCCAATGCTCACA	AGGGCGGAGTGACAAATCAG
P68	AGAAAAAGACTGGCTGGTGGT	TCAAGGAGCGTCGAGGAGTA
P69	ACCGACTTTGCAGATTAGAA	CCTAGAGAAATAAAACGCCG
P70	CCCCCAAACCTTCTGGTTTT	TCGGTCTCTTGACCTTTTGG
P71	GAGTAAGGCTCCCTAGAGTTCA	TTGTATGATGGGCCGGATGA
P72	GTGCCAACAAAGAAAAGAGG	GATGCCTAGTACAATTTTGGAG
P73	TTCGGTAATGTTTGTTGACG	CCTCTGCTTTGTTTTATTTGGC

P74	GAGAGCATAAGGATGAGTGT	CTCATCCACCTTTCATGACT
P75	GGGTCCCAAAACTTCTCAAA	GCTTGTGATGGTTGTACTTTGT
P76	CCAGATGAGTAAACCATCACT	AGAAGCTAAGCAATGCGATA
P77	TCGTGTACGTACCCTAAATC	GGTGGAACGTAGATGGTAAC
P78	TAAAGGGGAGACGAGCTATT	GTTATACGAGTCGTTGGCTA
P79	TCAGAAAGCATACAACATGA	CCTTTGTTTCACATTCTCTGTA
P80	AGTTCGGCGGGAAGATGAAT	AGTAGTCCCGGAGCTCACAT

Table S2 Information of 10 SSR primers

Primers	Sequence (5'-3')	Size (bp)
P1	P: TTTCTGTCTGGACTTGGTAA R: CCCTTTCACCTTCAACGTCT	220
P3	P: ATCCACATTGACATAGCCAGA R: GATTATTAGTCCACCCACCCT	220
P6	P: GGTATGACACTTTGCGGTATT R: GTATCGACAAGAAACATCCAGA	222
P12	P: GAACTTGTAGGCCTTTTGCG R: AAACCAGCTGGAGCAAGAGA	222
P22	P: GTAGGAGGGTTGTATTGTGG R: ATTTCTCTTCACACGAGCTT	218
P58	P: GACACAAGTCGTTCCAACCA R: GTGTGTGACTGAGCCTTCCA	216
P59	P: ACCGCGTAACCCCATATGT R: AGGATCTTGCAATATTTTCATCCTGT	222
P60	P: TGCACCTTCCATCATGAACGT R: ACTCACTAACCTAGCAAATGTCA	186
P64	P: TTCGATCAAAGGTTTATTGTCTCTT R: CACGATCGCGCACCTTTTTA	224
P70	P: CCCCCAACTTTCTGGTTTT	224

R: TCGGTCTCTTGACCTTTTGG

Table S3 Genetic diversity of Tartary buckwheat population

Accession	<i>Na</i>	<i>Ne</i>	<i>I</i>	<i>Ho</i>	<i>He</i>	<i>Nei</i>
BG	2.000	1.690	0.510	0.333	0.366	0.320
BY	1.750	1.540	0.425	0.107	0.307	0.285
DS	1.750	1.547	0.451	0.139	0.372	0.310
EL	1.182	1.182	0.126	0.182	0.182	0.091
GH	1.500	1.400	0.314	0.208	0.292	0.219
GT	1.917	1.662	0.526	0.104	0.398	0.355
JA	2.500	1.797	0.608	0.215	0.377	0.356
JK	2.250	1.805	0.530	0.233	0.337	0.303
JL	2.500	1.905	0.703	0.094	0.465	0.435
JW	1.083	1.083	0.058	0.083	0.083	0.042
KW	1.917	1.733	0.519	0.333	0.393	0.344
LL	1.546	1.479	0.335	0.136	0.303	0.227
LW	2.000	1.796	0.517	0.146	0.363	0.316
NL	1.636	1.606	0.410	0.273	0.409	0.284
NW	1.333	1.333	0.231	0.333	0.333	0.167
NY	1.250	1.157	0.136	0.104	0.104	0.091
TB	2.083	1.653	0.518	0.233	0.357	0.322
TT	1.333	1.246	0.176	0.104	0.128	0.112
WE	1.083	1.083	0.058	0.083	0.057	0.042
WM	2.250	2.082	0.712	0.167	0.556	0.463
WR	1.833	1.547	0.432	0.188	0.319	0.279
YC	1.750	1.579	0.437	0.146	0.339	0.297
YG	2.083	1.846	0.587	0.222	0.450	0.375
YL	1.364	1.327	0.242	0.121	0.206	0.172

YW	2.000	1.731	0.522	0.133	0.367	0.328
YY	1.250	1.120	0.112	0.118	0.080	0.072
ZH	2.000	1.676	0.510	0.111	0.351	0.322
ZJ	1.750	1.424	0.383	0.146	0.283	0.247
ZR	1.500	1.472	0.318	0.125	0.292	0.219
Mean	1.738	1.535	0.393	0.170	0.306	0.255