

Table S1. List of SSR markers used for molecular characterization and variety Identification of locally grown 25 potato varieties in Pakistan.

Sr. No	Primers	Primer Sequence 5' – 3'		References
		Forward Sequence	Reverse Sequence	
1	S122	GACACGTTACCATAAAA	AGAAGAATAGCAAAGCAA	[6]
2	S168	CTGCCGCAAAAAGTGAAAAC	TGAATGTAGGCCAAATTTTGAA	[6]
3	S151	GCTGCTAAACACTCAAGCAGAA	CAACTACAAGATTCCATCCACAG	[6]
4	S184	TCATCACAACGTGACCCCA	GGGCTTGAATGATGTGAAGCTC	[6]
5	S7	GACTGGCTGACCCTGAACTC	GACAAAATTACAGGAAGTCAAA	[6]
6	S170	CGCAAATCTTCATCCGATTC	TCCGGCGGATAATACTTGTT	[6]
7	S118	ACTGCTGTGGTTGGCGTC	ACGGCATAGATTGGAAGCATC	[6]
8	S192	ACTTCTGCATCTGGTGAAGC	GGTCTGGATTCCCAGGTTG	[6]
9	S180	ACTGCTGTGGTTGGCGTC	ACGGCATAGATTGGAAGCATC	[6]
10	S174	TGAGGGTTTTAGAAAAGGGA	CATCCTTGCAACAACCTCCT	[6]
11	S25	GCGAATGACAGGACAAGAGG	TGCCACTGCTACCATAACCA	[6]
12	S189	CCTTGTAAGACAGCAGTGGTC	TCCGCCAAGACTGATGCA	[6]
13	S182	GGAAGTCTCAACTGGCTG	TCAACTATATGCCTACTGCCCAA	[6]
14	S120	GTCTTTTTGGTGGTTTTCTT	TTATTTCTCTGTTGTGCTG	[6]
15	S187	CCGTGATGGGATTGCACA	TGATATTAACCATGGCAGCAGC	[6]
16	S183	TTCCTCTAAGCGGCAAAAGG	GGAGGAGACTTGGGTTTCTCC	[6]
17	S162	TATGGAATTCGGTGATGG	GACGGTGACAAAGAGGAAGG	[6]
18	S153	TATGTTCCACGCCATTTTCTCAG	ACGGAAACTCATCGTGCATT	[6]
19	S148	CAGCAAAATCAGAACCCGAT	GGATCATCAAATTCACCGCT	[6]
20	S188	GACAGAGAATATGGGACCACCA	GCAGCACCTTAAATGGCTGAC	[6]
21	4026/4027	AACTTGCGGAATAAGTGACG	ACTATACACACGTGCCCTGAAACTAG	[30]
22	8242	CGTCTTGATGTCTTAGTTGTGG	GCAAAACCAGAAAGGCTAACAAAC	[30]
23	12002	CCATGAACCTGAAGTTTTCTGC	TGGATATCTTGTGCCTACAAGCTAG	[30]
24	16410	GTATGTTTGAGTAAATCCTCCACCA	TTCTCTGCCCCCTTTTAATTG	[30]
25	31924	CGAAGACACCAAATCGCTCAG	GAAACGCCATTAACATTTTACATCG	[30]
26	35584	AGTAAGTCAAACCTCAACTCCAAGGTG	GTTCTAGATTATCTCACTCATGCCTTTC	[30]
27	43016	CAAGCTGCATGAAAGCCATC	TTTGCCTAAAAGTTTGTAGTGTGAGG	[30]
28	46514	TGCTTTTTGTTTCCTTTTGTGTG	GGAATGAAACTAAGCCTTGCTCTG	[30]
29	STM1053	TCTCCCCATCTTAATGTTTC	CAACACAGCATAACAGATCATC	[24]
30	STM0037	AATTTAACTTAGAAGATTAGTCTC	ATTTGGTTGGGTATGATA	[24]
31	STM0031	CATACGCACGCACGTACAC	TTCAACCTATCATTTTGTGAGTCG	[24]
32	STM1104	TGATTCTCTTGCCCTACTGTAATCG-	CAAAGTGGTGTGAAGCTGTGA	[24]
33	STM1052	CAATTTCGTTTTTTCATGTGACAC	ATGGCGTAATTGATTAAATACGTAA	[24]
34	STM1106	TCCAGCTGATTGGTTAGGTTG	ATGCGAATCTACTCGTCATGG	[24]
35	STM5114	AATGGCTCTCTCTGTATGCT	GCTGTCCCAACTATCTTTGA	[24]
36	STG0016	AGCTGCTCAGCATCAAGAGA	ACCACCTCAGGCACTTCATC	[24]
37	STI0004	GCTGCTAAACACTCAAGCAGAA	CAACTACAAGATTCCATCCACAG	[24]
38	STI0012	GAAGCGACTTCAAAAATCAGA	AAAGGGAGGAATAGAAACCAAAA	[24]
39	STI0030	TTGACCCTCCAACCTATAGATTCTTC	TGACAACTTTAAAGCATATGTCAGC	[24]
40	STI0032	TGGGAAGAATCCTGAAATGG	TGCTCTACCAATTAACGGCA	[24]