

Supplementary file

Appendix 1. Summary of Chi-Square Tests for Hardy-Weinberg Equilibrium.

Pop	Locus	DF	ChiSq	Prob	Signif
R	CsCAT 1	6	3.769	0.708	ns
R	EMC 38	10	7.289	0.698	ns
R	CsCAT 14	6	2.722	0.843	ns
R	CsCAT 15	3	6.537	0.088	ns
R	CsCAT 17	3	1.284	0.733	ns
R	CsCAT 41	3	8.889	0.031	*
R	QpZAG110	1	0.036	0.850	ns
R	CsCAT 3	Monomorphic			
R	CsCAT 6	1	2.880	0.090	ns
R	CsCAT 7	3	0.889	0.828	ns
S	CsCAT 1	3	0.163	0.983	ns
S	EMC 38	1	8.000	0.005	**
S	CsCAT 14	3	0.889	0.828	ns
S	CsCAT 15	3	5.156	0.161	ns
S	CsCAT 17	3	6.041	0.110	ns
S	CsCAT 41	3	8.163	0.043	*
S	QpZAG110	1	0.000	1.000	ns
S	CsCAT 3	Monomorphic			
S	CsCAT 6	3	2.880	0.410	ns
S	CsCAT 7	1	4.840	0.028	*
SH	CsCAT 1	3	2.813	0.421	ns
SH	EMC 38	3	9.000	0.029	*
SH	CsCAT 14	6	6.303	0.390	ns
SH	CsCAT 15	1	9.000	0.003	**
SH	CsCAT 17	6	1.331	0.970	ns
SH	CsCAT 41	3	12.240	0.007	**
SH	QpZAG110	6	18.040	0.006	**
SH	CsCAT 3	3	4.269	0.234	ns
SH	CsCAT 6	6	6.063	0.416	ns
SH	CsCAT 7	6	7.735	0.258	ns
V	CsCAT 1	3	2.541	0.468	ns
V	EMC 38	3	8.000	0.046	*
V	CsCAT 14	3	8.889	0.031	*
V	CsCAT 15	3	6.444	0.092	ns
V	CsCAT 17	3	1.510	0.680	ns
V	CsCAT 41	10	20.444	0.025	*
V	QpZAG110	Monomorphic			

V	CsCAT 3	1	0.036	0.850	ns
V	CsCAT 6	1	0.036	0.850	ns
V	CsCAT 7	3	1.778	0.620	ns

ns=not significant, * P<0.05, ** P<0.01, * P<0.001**

R=QalehRoudkhan region; S=SiyahMazgi region; SH=Shafaroud region; V =Veysroud region

DF= Degrees of freedom

Appendix 2. The value of Differentiation (F_{st}) and the amount of calculated Nm based on the frequency at 10 loci used for all sample locations.

	CsCAT1	EMC38	CsCAT14	CsCAT15	CsCAT17	CsCAT41	QpZAG110	CsCAT3	CsCAT6	CsCAT7	Mean	SE
Fis	0.093	-0.690	0.014	-0.421	-0.343	0.584	-0.037	-0.302	-0.309	-0.235	-0.165	0.110
Fit	0.247	-0.553	0.191	-0.282	-0.134	0.609	0.607	0.184	-0.281	0.039	0.063	0.121
Fst	0.170	0.081	0.180	0.098	0.156	0.060	0.621	0.373	0.021	0.222	0.198	0.056
Nm	1.223	2.832	1.141	2.303	1.355	3.899	0.153	0.420	11.696	0.877	2.590	1.074