

Table S2.1 Locus-specific summary statistic for 17 SSR and 31 SNP loci in four subpopulations of *Armillaria cepistipes*: 1 - Carpathian Beech forests, 2 - Carpathian Mixed / conifer, 3 – Alpine North and 4 – Alpine South. Na - number of alleles per locus; Ar - allelic richness; Evenness – index of abundance of alleles across loci;  $H_{exp}$  - expected heterozygosity;  $H_{obs}$  - observed heterozygosity and  $P$  value computed for HWE test. Consistent deviation from Hardy-Weinberg equilibrium across all four subpopulations marked with red color.

**17 SSR loci**  
Carpathian Beech

Loci	Na	Ar	Evenness	$H_{exp}$	$H_{obs}$	P value
Arm02	5	4	0.67	0.54	0.40	0.0015
Arm05	5	5	0.79	0.71	0.71	0.1136
Arm09	10	9	0.92	0.87	0.67	0.0000
Arm11	8	6	0.59	0.58	0.65	0.0179
Arm16	9	8	0.73	0.78	0.76	0.0022
Arm15	4	2	0.38	0.07	0.05	0.1349
Am109	3	2	0.51	0.15	0.14	0.0659
Am111	5	4	0.40	0.19	0.20	1.0000
<b>AC18</b>	<b>9</b>	<b>8</b>	<b>0.75</b>	<b>0.80</b>	<b>0.32</b>	<b>0.0000</b>
AC31	7	5	0.49	0.33	0.21	0.0000
AC37	9	8	0.63	0.66	0.75	0.2017
AC12	5	4	0.64	0.49	0.39	0.0019
AC16	4	4	0.84	0.58	0.47	0.0563
AC04	7	6	0.52	0.54	0.57	0.0091
AC38	6	6	0.69	0.62	0.60	0.1127
AC22	11	9	0.89	0.87	0.71	0.0000
AC34	7	5	0.37	0.18	0.17	0.6066
<b>mean</b>	7	6	0.64	0.53	0.46	-*
<b>s.d.</b>	2	2	0.2	0.26	0.24	-

Carpathian Mixed / conifer

Loci	Na	Ar	Evenness	$H_{exp}$	$H_{obs}$	P value
Arm02	6	4	0.68	0.53	0.27	0.000
Arm05	5	5	0.76	0.69	0.59	0.001
Arm09	11	9	0.87	0.85	0.77	0.000
Arm11	7	5	0.62	0.57	0.56	0.164
Arm16	9	8	0.70	0.76	0.73	0.004
Arm15	4	3	0.37	0.07	0.06	0.002
Am109	2	2	0.46	0.08	0.08	1.000
Am111	3	3	0.40	0.08	0.07	0.076
<b>AC18</b>	<b>9</b>	<b>8</b>	<b>0.78</b>	<b>0.82</b>	<b>0.43</b>	<b>0.000</b>
AC31	7	6	0.53	0.50	0.38	0.001
AC37	8	7	0.72	0.69	0.66	0.080
AC12	4	4	0.65	0.49	0.47	0.764
AC16	4	4	0.81	0.57	0.44	0.000
AC04	7	7	0.53	0.57	0.58	0.053
AC38	5	5	0.67	0.60	0.58	0.019
AC22	11	10	0.85	0.87	0.69	0.000
AC34	6	5	0.40	0.23	0.25	1.000
<b>mean</b>	6	6	0.64	0.53	0.45	-
<b>s.d.</b>	3	2	0.16	0.26	0.23	-

## Alpine North

Loci	Na	Ar	Evenness	H <sub>exp</sub>	H <sub>obs</sub>	P value
Arm02	4	4	0.76	0.56	0.45	0.150
Arm05	5	5	0.72	0.60	0.61	0.470
Arm09	7	7	0.92	0.84	0.77	0.206
Arm11	5	5	0.78	0.63	0.58	0.040
Arm16	7	7	0.88	0.80	0.87	0.202
Arm15	4	3	0.39	0.11	0.08	0.014
Am109	3	3	0.42	0.11	0.06	0.007
Am111	3	3	0.56	0.32	0.27	0.070
<b>AC18</b>	<b>7</b>	<b>7</b>	<b>0.85</b>	<b>0.81</b>	<b>0.15</b>	<b>0.000</b>
AC31	6	6	0.56	0.53	0.47	0.049
AC37	8	7	0.80	0.79	0.79	0.311
AC12	6	5	0.65	0.49	0.52	0.158
AC16	5	5	0.67	0.55	0.44	0.047
AC04	7	6	0.51	0.46	0.42	0.040
AC38	5	5	0.69	0.54	0.50	0.373
AC22	12	11	0.79	0.87	0.71	0.015
AC34	6	5	0.42	0.27	0.26	0.656
<b>mean</b>	<b>6</b>	<b>5</b>	<b>0.67</b>	<b>0.55</b>	<b>0.47</b>	<b>-</b>
<b>s.d.</b>	<b>2</b>	<b>2</b>	<b>0.17</b>	<b>0.24</b>	<b>0.24</b>	<b>-</b>

## Alpine South

Loci	Na	Ar	Evenness	H <sub>exp</sub>	H <sub>obs</sub>	P value
Arm02	3	3	0.84	0.59	0.47	0.004
Arm05	7	6	0.64	0.59	0.64	0.988
Arm09	8	8	0.86	0.82	0.67	0.409
Arm11	5	5	0.67	0.57	0.61	0.302
Arm16	8	8	0.85	0.82	0.86	0.775
Arm15	3	3	0.48	0.20	0.22	1.000
Am109	3	3	0.46	0.16	0.14	0.211
Am111	3	3	0.42	0.09	0.06	0.116
<b>AC18</b>	<b>7</b>	<b>7</b>	<b>0.78</b>	<b>0.73</b>	<b>0.14</b>	<b>0.000</b>
AC31	7	7	0.50	0.55	0.56	0.227
AC37	7	7	0.76	0.76	0.77	0.057
AC12	4	4	0.68	0.43	0.44	0.677
AC16	3	3	0.80	0.51	0.48	0.008
AC04	6	5	0.51	0.40	0.34	0.185
AC38	6	5	0.67	0.52	0.53	0.991
AC22	10	10	0.81	0.86	0.64	0.003
AC34	6	4	0.44	0.23	0.25	1.000
<b>mean</b>	<b>6</b>	<b>5</b>	<b>0.66</b>	<b>0.52</b>	<b>0.46</b>	<b>-</b>
<b>s.d.</b>	<b>2</b>	<b>2</b>	<b>0.16</b>	<b>0.24</b>	<b>0.23</b>	<b>-</b>

### 31 SNP loci

#### Carpathian Beech

Loci	Na	Ar	Evenness	H <sub>exp</sub>	H <sub>obs</sub>	P value
FG487_3	2	-	0.85	0.42	0.33	0.080
FG524_2	2	-	0.43	0.06	0.06	1.000
FG529_4	2	-	1.00	0.50	0.44	0.230
FG529_5	2	-	0.96	0.48	0.41	0.195
FG652_11	2	-	1.00	0.50	0.56	0.318
FG652_20	2	-	0.72	0.32	0.34	0.511
FG686_3	2	-	0.89	0.44	0.38	0.247
FG691_2	2	-	0.73	0.32	0.29	0.354
FG698_1	2	-	0.93	0.47	0.48	0.830
FG716_4	2	-	0.87	0.43	0.55	0.001
FG730_11	2	-	0.71	0.31	0.26	0.199
FG735_13	2	-	0.41	0.05	0.05	1.000
FG735_16	2	-	0.81	0.39	0.37	0.599
FG747_1	2	-	0.55	0.16	0.17	1.000
FG747_2	2	-	0.64	0.25	0.15	0.000
FG756_2	2	-	0.39	0.03	0.03	1.000
FG762_7	2	-	1.00	0.50	0.51	1.000
FG771_1	2	-	0.55	0.16	0.17	1.000
FG771_3	2	-	0.55	0.16	0.17	1.000
FG788_2	2	-	0.51	0.12	0.08	0.035
FG848_7	2	-	1.00	0.50	0.40	0.079
FG893_2	2	-	0.98	0.49	0.49	1.000
FG894_7	2	-	0.53	0.14	0.10	0.075
MS400_3	2	-	0.64	0.25	0.24	0.663
MS413_1	2	-	0.81	0.39	0.44	0.322
MS413_2	2	-	0.70	0.30	0.32	0.728
MS428_4	2	-	0.39	0.03	0.03	1.000
MS428_6	2	-	0.44	0.07	0.07	1.000
MS441_4	2	-	1.00	0.50	0.47	0.695
MS452_7	2	-	0.69	0.29	0.29	0.707
MS481_16	2	-	0.80	0.38	0.39	1.000
<b>mean</b>	2	-	0.72	0.30	0.29	-
<b>s.d.</b>	0	-	0.21	0.17	0.17	-

## Carpathian Mixed / conifer

<b>Loci</b>	<b>Na</b>	<b>Ar</b>	<b>Evenness</b>	<b>H<sub>exp</sub></b>	<b>H<sub>obs</sub></b>	<b>P value</b>
FG487_3	2	-	0.87	0.43	0.44	1.000
FG524_2	2	-	0.40	0.04	0.04	1.000
FG529_4	2	-	0.93	0.47	0.47	1.000
FG529_5	2	-	0.87	0.43	0.47	0.592
FG652_11	2	-	0.98	0.49	0.47	0.845
FG652_20	2	-	0.64	0.24	0.22	0.658
FG686_3	2	-	0.95	0.48	0.50	0.805
FG691_2	2	-	0.66	0.26	0.31	0.380
FG698_1	2	-	0.97	0.49	0.51	0.761
FG716_4	2	-	0.80	0.38	0.35	0.768
FG730_11	2	-	0.68	0.28	0.25	0.404
FG735_13	2	-	0.47	0.08	0.09	1.000
FG735_16	2	-	0.93	0.47	0.56	0.135
FG747_1	2	-	0.51	0.12	0.13	1.000
FG747_2	2	-	0.75	0.35	0.26	0.054
FG756_2	2	-	0.50	0.11	0.09	0.204
FG762_7	2	-	1.00	0.50	0.49	0.844
FG771_1	2	-	0.56	0.17	0.19	1.000
FG771_3	2	-	0.56	0.17	0.19	1.000
FG788_2	2	-	0.50	0.11	0.12	1.000
FG848_7	2	-	1.00	0.50	0.40	0.092
FG893_2	2	-	0.99	0.50	0.54	0.581
FG894_7	2	-	0.50	0.11	0.09	0.190
MS400_3	2	-	0.55	0.16	0.18	1.000
MS413_1	2	-	0.79	0.37	0.43	0.365
MS413_2	2	-	0.74	0.34	0.43	0.032
MS428_4	2	-	0.33	0.01	0.01	1.000
MS428_6	2	-	0.45	0.07	0.07	1.000
MS441_4	2	-	1.00	0.50	0.54	0.646
MS452_7	2	-	0.69	0.29	0.29	1.000
MS481_16	2	-	0.82	0.40	0.37	0.527
<b>mean</b>	2	-	0.72	0.30	0.31	-
<b>s.d.</b>	0	-	0.21	0.17	0.17	-

Alpine North

<b>Loci</b>	<b>Na</b>	<b>Ar</b>	<b>Evenness</b>	<b>H<sub>exp</sub></b>	<b>H<sub>obs</sub></b>	<b>P value</b>
FG487_3	2	-	0.83	0.40	0.32	0.225
FG524_2	2	-	0.55	0.16	0.18	1.000
FG529_4	2	-	0.81	0.39	0.35	0.483
FG529_5	2	-	0.67	0.27	0.26	0.656
FG652_11	2	-	0.98	0.49	0.48	1.000
FG652_20	2	-	0.72	0.31	0.32	1.000
FG686_3	2	-	0.87	0.43	0.45	0.789
FG691_2	2	-	0.63	0.24	0.18	0.059
FG698_1	2	-	0.90	0.45	0.53	0.112
FG716_4	2	-	0.94	0.47	0.48	1.000
FG730_11	2	-	0.94	0.47	0.47	1.000
FG735_13	2	-	0.52	0.14	0.15	1.000
FG735_16	2	-	0.87	0.43	0.35	0.190
FG747_1	1	-	-	-	-	-
FG747_2	2	-	0.77	0.36	0.34	0.727
FG756_2	2	-	0.54	0.15	0.16	1.000
FG762_7	2	-	0.98	0.49	0.52	0.847
FG771_1	2	-	0.66	0.26	0.31	0.320
FG771_3	2	-	0.66	0.26	0.31	0.324
FG788_2	2	-	0.41	0.05	0.05	1.000
FG848_7	2	-	0.96	0.49	0.61	0.069
FG893_2	2	-	0.85	0.42	0.39	0.752
FG894_7	1	-	-	-	-	-
MS400_3	2	-	0.64	0.25	0.23	0.593
MS413_1	2	-	0.74	0.33	0.39	0.259
MS413_2	2	-	0.72	0.31	0.26	0.206
MS428_4	2	-	0.52	0.14	0.15	1.000
MS428_6	2	-	0.52	0.14	0.15	1.000
MS441_4	2	-	0.88	0.43	0.44	1.000
MS452_7	2	-	0.91	0.45	0.42	0.526
MS481_16	2	-	0.49	0.11	0.08	0.152
<b>mean</b>	2	-	0.74	0.32	0.32	-
<b>s.d.</b>	0	-	0.17	0.14	0.15	-

## Alpine South

<b>Loci</b>	<b>Na</b>	<b>Ar</b>	<b>Evenness</b>	<b>H<sub>exp</sub></b>	<b>H<sub>obs</sub></b>	<b>P value</b>
FG487_3	2	-	0.68	0.29	0.28	1.000
FG524_2	2	-	0.34	0.02	0.02	1.000
FG529_4	2	-	0.77	0.36	0.38	1.000
FG529_5	2	-	0.56	0.17	0.16	0.414
FG652_11	2	-	0.87	0.43	0.45	0.775
FG652_20	2	-	0.84	0.41	0.41	1.000
FG686_3	2	-	0.87	0.43	0.30	0.014
FG691_2	2	-	0.77	0.36	0.28	0.071
FG698_1	2	-	0.84	0.41	0.44	0.757
FG716_4	2	-	0.96	0.48	0.52	0.573
FG730_11	2	-	0.97	0.49	0.36	0.031
FG735_13	2	-	0.70	0.30	0.20	0.036
FG735_16	2	-	0.81	0.39	0.42	0.502
FG747_1	1	-	-	-	-	-
FG747_2	2	-	0.82	0.39	0.34	0.280
FG756_2	2	-	0.52	0.13	0.14	1.000
FG762_7	2	-	0.95	0.48	0.33	0.026
FG771_1	2	-	0.57	0.18	0.17	0.500
FG771_3	2	-	0.57	0.18	0.17	0.482
FG788_2	2	-	0.52	0.13	0.14	1.000
FG848_7	2	-	0.89	0.44	0.44	1.000
FG893_2	2	-	0.84	0.41	0.38	0.522
FG894_7	1	-	-	-	-	-
MS400_3	2	-	0.56	0.17	0.19	1.000
MS413_1	2	-	0.57	0.18	0.17	0.500
MS413_2	2	-	0.53	0.15	0.16	1.000
MS428_4	2	-	0.47	0.09	0.09	1.000
MS428_6	2	-	0.47	0.09	0.09	1.000
MS441_4	2	-	1.00	0.50	0.31	0.000
MS452_7	2	-	0.84	0.41	0.34	0.248
MS481_16	2	-	0.47	0.09	0.09	1.000
<b>mean</b>	2	-	0.71	0.29	0.27	-
<b>s.d.</b>	0	-	0.19	0.15	0.13	-

Table S2.2 Pair-wise linkage disequilibrium among loci in four subpopulations of *Armillaria cepistipes*: 1 - Carpathian Beech, 2 - Carpathian Mixed / conifer, 3 – Alpine North and 4 – Alpine South. Significant deviation from linkage disequilibrium among loci in four subpopulations are marked with red color ( $P$  values < Bonferroni correction with  $\alpha=0.05$ )

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG529_4&FG529_5	0.000	0.000	0.000	0.000
FG771_1&FG771_3	0.000	0.000	0.000	0.000
FG735_16&MS481_16	0.000	0.280	0.195	0.409
FG652_11&FG652_20	0.000	0.003	0.005	0.000
MS428_4&MS428_6	0.000	0.073	0.000	0.000
MS400_3&MS428_4	0.001	0.173	0.255	1.000
FG730_11&MS481_16	0.001	0.395	0.524	0.868
FG698_1&FG747_1	0.001	0.089	1.000	1.000
MS400_3&MS428_6	0.004	0.578	0.256	1.000
FG893_2&MS481_16	0.008	0.788	1.000	0.354
FG529_4&MS413_1	0.008	0.424	0.503	0.366
FG524_2&FG652_11	0.008	0.420	0.033	0.533
FG487_3&FG529_4	0.009	0.077	0.474	0.880
FG747_2&FG771_3	0.016	0.047	0.682	0.626
FG747_2&FG771_1	0.017	0.049	0.682	0.637
FG652_11&FG716_4	0.022	0.310	0.823	0.183
FG730_11&FG893_2	0.022	0.025	0.828	0.580
FG686_3&MS428_4	0.024	1.000	0.698	0.505
FG716_4&FG747_2	0.024	0.448	0.446	0.759
FG762_7&FG848_7	0.026	0.002	0.845	0.233
MS441_4&MS481_16	0.027	0.219	1.000	0.492
FG691_2&MS428_4	0.028	1.000	0.158	0.556
FG848_7&MS413_1	0.031	0.898	0.361	0.953
FG652_11&FG698_1	0.032	0.163	0.469	0.267
FG747_1&FG747_2	0.035	0.456	1.000	1.000
FG735_16&FG893_2	0.035	0.873	0.351	0.748
FG524_2&FG771_3	0.036	0.615	0.292	1.000
FG524_2&FG771_1	0.036	0.615	0.284	1.000
FG487_3&FG893_2	0.037	0.018	0.035	0.561
FG848_7&MS452_7	0.037	0.429	0.147	0.354
FG735_16&MS413_2	0.037	0.759	0.670	0.138
FG686_3&FG698_1	0.037	0.021	0.814	0.758
FG529_5&MS428_6	0.039	0.460	0.581	0.441
FG747_1&MS452_7	0.041	1.000	1.000	1.000
FG730_11&MS452_7	0.048	0.756	0.782	0.445
FG529_4&MS413_2	0.049	0.482	0.644	0.051
FG487_3&MS441_4	0.053	0.131	1.000	0.745

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG691_2&MS413_1	0.054	0.303	0.293	0.860
FG487_3&FG848_7	0.054	0.380	0.670	0.662
FG652_11&FG686_3	0.055	0.034	0.694	0.268
FG735_13&MS400_3	0.055	0.359	0.202	0.867
FG730_11&MS400_3	0.056	0.574	0.126	0.917
MS413_2&MS441_4	0.057	0.015	0.961	0.767
FG487_3&FG691_2	0.058	0.467	0.053	0.894
FG652_20&FG788_2	0.059	0.302	1.000	0.277
FG771_1&MS428_6	0.060	0.381	0.430	0.416
FG686_3&FG848_7	0.060	0.365	0.505	0.598
FG771_3&MS428_6	0.061	0.379	0.440	0.417
FG529_5&FG747_2	0.061	0.564	0.679	0.793
FG529_5&FG848_7	0.066	0.319	0.562	0.779
FG698_1&MS481_16	0.066	0.576	0.052	0.038
FG686_3&FG691_2	0.067	0.002	0.902	0.196
FG756_2&FG893_2	0.068	1.000	0.882	0.173
FG524_2&MS481_16	0.075	0.254	0.212	1.000
FG771_1&MS428_4	0.076	1.000	0.440	0.420
FG771_3&MS428_4	0.076	1.000	0.431	0.422
FG652_11&MS441_4	0.078	0.123	0.416	0.324
FG529_4&FG848_7	0.078	0.646	0.158	0.934
FG730_11&MS413_2	0.086	0.669	0.621	0.469
FG698_1&FG848_7	0.086	0.079	0.575	0.671
FG686_3&FG730_11	0.086	0.231	0.730	0.141
FG487_3&MS413_2	0.088	0.767	0.120	0.788
MS413_1&MS413_2	0.088	0.002	0.260	1.000
FG524_2&FG529_5	0.089	0.248	0.805	0.015
FG735_13&MS441_4	0.090	0.031	0.096	0.239
FG529_4&FG747_1	0.091	0.092	1.000	1.000
FG716_4&FG730_11	0.092	0.016	0.809	0.273
FG698_1&MS428_4	0.095	0.485	0.791	0.780
FG788_2&MS481_16	0.095	0.221	1.000	1.000
FG487_3&FG747_2	0.096	0.889	0.340	0.242
FG652_11&FG893_2	0.096	0.815	0.743	0.567
FG735_16&MS441_4	0.096	0.284	0.524	0.426
FG698_1&FG756_2	0.098	0.043	1.000	0.299
FG652_20&FG686_3	0.100	0.415	0.709	0.964
FG730_11&FG788_2	0.113	0.137	0.371	0.432
FG686_3&MS428_6	0.113	0.057	0.699	0.501
FG716_4&FG756_2	0.117	0.477	0.722	0.630



Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG747_2&FG893_2	0.118	0.237	0.705	0.350
FG529_5&FG771_1	0.120	0.804	0.070	1.000
FG529_5&FG747_1	0.122	0.414	1.000	1.000
FG747_1&FG771_3	0.122	0.357	1.000	1.000
FG529_5&MS481_16	0.124	0.364	0.443	0.447
FG524_2&FG652_20	0.125	0.615	0.056	1.000
FG771_3&MS400_3	0.125	0.437	0.471	1.000
FG529_5&FG771_3	0.126	0.808	0.070	1.000
FG730_11&FG747_2	0.126	0.181	0.797	0.067
FG716_4&FG735_16	0.127	0.095	0.399	0.519
FG747_1&FG771_1	0.127	0.356	1.000	1.000
FG652_20&FG747_2	0.128	0.155	0.319	0.902
FG771_1&MS400_3	0.129	0.434	0.474	1.000
FG529_4&FG686_3	0.130	0.195	0.364	0.101
FG735_13&MS428_4	0.133	1.000	0.605	0.196
FG686_3&MS452_7	0.136	0.167	0.796	0.727
FG788_2&FG893_2	0.137	0.023	0.685	0.878
FG686_3&FG788_2	0.137	0.228	0.101	0.451
FG652_20&FG691_2	0.139	0.898	0.927	0.932
FG894_7&MS413_1	0.147	0.164	1.000	1.000
FG487_3&FG771_1	0.151	0.900	0.729	1.000
FG652_11&FG848_7	0.152	0.863	0.535	0.404
FG529_4&MS428_6	0.155	0.848	1.000	0.460
FG652_20&FG893_2	0.156	0.777	0.525	0.613
FG487_3&FG771_3	0.157	0.897	0.730	1.000
FG730_11&FG747_1	0.158	0.898	1.000	1.000
FG529_5&MS413_1	0.159	1.000	0.482	1.000
FG894_7&MS452_7	0.164	0.164	1.000	1.000
FG529_5&MS400_3	0.166	0.155	0.177	0.222
FG652_11&FG735_13	0.169	0.153	0.798	0.184
FG848_7&MS481_16	0.170	0.115	0.529	0.239
FG893_2&MS413_1	0.172	0.006	0.835	1.000
FG652_20&FG730_11	0.172	0.922	1.000	0.869
FG524_2&FG691_2	0.177	1.000	0.394	0.095
FG735_13&MS481_16	0.178	0.353	0.161	0.374
MS400_3&MS413_1	0.179	0.351	0.011	0.551
FG487_3&FG698_1	0.180	0.371	0.826	0.585
FG529_4&FG771_3	0.180	0.485	0.410	0.249
FG529_4&FG771_1	0.181	0.493	0.404	0.256
FG747_2&FG788_2	0.185	0.864	0.628	0.686
FG652_20&MS400_3	0.185	0.629	0.736	0.285
FG762_7&FG894_7	0.186	0.884	1.000	1.000

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG487_3&FG652_11	0.187	0.935	0.685	0.170
FG529_5&FG686_3	0.188	0.099	0.292	0.003
FG762_7&FG771_3	0.188	0.209	0.000	0.643
FG652_20&FG716_4	0.191	1.000	0.884	0.560
FG762_7&FG771_1	0.192	0.206	0.001	0.638
FG487_3&MS400_3	0.193	0.430	0.797	0.656
FG529_5&FG735_13	0.194	0.435	0.438	0.622
FG788_2&MS400_3	0.197	0.218	0.616	0.188
FG698_1&FG788_2	0.200	0.244	0.073	0.441
FG747_2&FG848_7	0.210	0.323	0.672	0.729
FG735_16&FG848_7	0.214	0.039	0.799	0.606
FG698_1&MS413_1	0.215	0.917	0.921	0.676
FG487_3&FG762_7	0.216	0.245	0.642	0.561
FG652_11&FG730_11	0.218	0.376	0.982	0.412
FG771_1&MS441_4	0.219	0.002	0.852	0.745
FG771_3&MS441_4	0.220	0.002	0.849	0.746
FG529_5&MS428_4	0.222	0.532	0.578	0.447
FG652_11&FG691_2	0.222	0.939	0.985	1.000
FG652_20&FG747_1	0.223	1.000	1.000	1.000
FG686_3&FG747_2	0.224	0.900	0.821	0.875
FG691_2&MS400_3	0.225	0.316	0.605	0.776
FG730_11&FG771_1	0.230	0.301	0.404	0.409
FG735_13&FG848_7	0.231	0.660	0.628	0.720
FG730_11&FG771_3	0.232	0.309	0.400	0.391
FG487_3&FG529_5	0.232	0.086	0.234	1.000
FG747_2&MS413_1	0.235	0.688	0.123	0.539
FG747_1&FG893_2	0.235	1.000	1.000	1.000
MS428_6&MS481_16	0.246	1.000	0.106	1.000
FG652_11&FG762_7	0.247	0.194	0.054	0.804
FG652_20&MS413_1	0.248	0.958	0.767	0.942
FG735_13&MS428_6	0.252	0.678	0.610	0.196
FG529_4&MS481_16	0.252	0.292	0.337	0.469
FG686_3&FG735_13	0.254	0.467	0.578	0.705
FG716_4&FG747_1	0.256	0.247	1.000	1.000
FG894_7&MS413_2	0.256	0.822	1.000	1.000
FG691_2&MS413_2	0.257	0.790	0.567	1.000
FG686_3&FG735_16	0.261	0.609	0.816	0.138
FG771_1&MS413_1	0.261	0.547	0.145	0.442
FG524_2&FG848_7	0.262	1.000	0.269	0.544
FG771_3&MS413_1	0.263	0.558	0.148	0.452
MS413_1&MS452_7	0.267	0.759	0.433	0.513
FG716_4&MS452_7	0.271	0.972	0.826	0.786

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG652_11&MS413_2	0.275	0.279	0.551	0.019
FG698_1&FG762_7	0.275	0.033	0.778	0.556
MS400_3&MS413_2	0.276	1.000	0.322	1.000
FG716_4&FG848_7	0.280	0.084	0.345	0.286
FG735_13&MS413_2	0.280	0.230	0.620	0.295
FG529_4&MS400_3	0.286	0.297	0.121	1.000
FG529_5&FG762_7	0.290	0.055	0.766	0.958
FG730_11&MS441_4	0.301	0.536	0.675	0.119
FG771_3&FG893_2	0.302	0.463	0.089	0.671
FG771_1&FG788_2	0.302	0.207	1.000	0.083
FG747_1&MS441_4	0.308	0.808	1.000	1.000
MS428_4&MS481_16	0.309	1.000	0.103	1.000
FG771_1&FG893_2	0.310	0.460	0.081	0.661
FG698_1&MS428_6	0.313	1.000	0.792	0.785
FG893_2&MS441_4	0.314	0.190	0.023	0.105
FG771_3&FG788_2	0.315	0.204	1.000	0.084
FG524_2&FG686_3	0.316	0.565	0.334	1.000
FG762_7&MS413_1	0.316	0.590	0.076	0.099
FG652_11&FG735_16	0.317	0.475	0.319	0.931
FG762_7&MS428_4	0.317	0.223	0.298	0.755
FG698_1&FG730_11	0.321	0.756	0.014	0.299
FG698_1&MS441_4	0.323	0.007	0.470	0.899
FG652_11&MS481_16	0.327	0.494	0.022	0.587
FG487_3&FG730_11	0.330	0.023	0.093	0.884
MS413_1&MS428_6	0.333	1.000	0.413	1.000
FG730_11&MS413_1	0.334	0.197	0.943	0.062
FG652_11&FG788_2	0.334	0.533	0.220	0.341
FG848_7&MS441_4	0.336	0.591	0.227	0.715
FG788_2&MS413_1	0.337	0.377	1.000	1.000
FG529_4&MS428_4	0.337	0.531	1.000	0.469
MS413_2&MS452_7	0.340	0.639	0.727	0.181
FG735_13&MS452_7	0.345	0.128	0.350	0.342
FG893_2&MS413_2	0.352	0.944	0.219	1.000
FG652_20&MS428_4	0.353	0.244	0.784	0.247
FG686_3&FG771_1	0.354	0.245	0.252	0.290
FG686_3&FG771_3	0.358	0.243	0.246	0.286
FG848_7&MS428_4	0.359	0.295	0.635	0.587
FG698_1&MS400_3	0.364	0.065	0.830	0.716
FG698_1&FG735_16	0.365	0.024	0.911	0.026
FG771_1&MS481_16	0.366	0.602	0.411	1.000
FG691_2&MS428_6	0.372	1.000	0.156	0.559
FG529_4&FG747_2	0.372	0.046	0.298	1.000
FG771_3&MS481_16	0.372	0.608	0.412	1.000

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG716_4&FG893_2	0.373	0.309	0.761	0.326
FG735_13&FG762_7	0.373	0.225	1.000	0.622
FG686_3&FG747_1	0.382	0.702	1.000	1.000
FG691_2&FG730_11	0.386	0.800	0.222	0.270
FG893_2&MS428_6	0.396	0.616	0.223	0.778
FG788_2&FG894_7	0.397	0.241	1.000	1.000
FG747_1&MS481_16	0.397	0.243	1.000	1.000
FG524_2&MS400_3	0.400	1.000	0.443	0.189
FG652_20&MS452_7	0.401	0.933	0.071	0.942
FG735_16&FG771_3	0.402	0.121	0.802	0.127
FG487_3&FG524_2	0.406	0.425	1.000	1.000
FG735_16&FG771_1	0.408	0.115	0.803	0.126
FG529_4&FG652_20	0.408	0.820	0.809	0.677
FG716_4&MS441_4	0.418	0.033	0.438	0.366
FG762_7&MS413_2	0.418	0.952	0.962	0.906
FG652_20&FG894_7	0.420	0.761	1.000	1.000
FG652_20&MS413_2	0.430	0.887	0.749	0.018
FG529_4&MS441_4	0.431	0.752	0.941	0.906
FG652_11&FG894_7	0.437	1.000	1.000	1.000
FG848_7&FG893_2	0.440	0.042	0.496	0.166
FG529_4&FG698_1	0.442	0.406	0.712	0.237
FG691_2&FG848_7	0.443	0.181	0.959	0.488
FG735_16&FG894_7	0.445	0.928	1.000	1.000
FG691_2&MS441_4	0.446	0.313	0.845	0.253
FG524_2&FG762_7	0.448	1.000	0.732	1.000
FG747_2&MS413_2	0.449	0.308	0.746	0.313
FG730_11&FG848_7	0.453	0.108	0.552	0.464
FG716_4&FG788_2	0.455	0.627	0.572	0.300
FG487_3&FG716_4	0.461	0.929	0.247	0.265
FG686_3&MS400_3	0.463	0.614	0.150	0.466
FG686_3&FG716_4	0.465	0.278	0.204	0.561
FG529_4&FG730_11	0.468	0.391	0.578	0.752
FG894_7&MS481_16	0.469	0.494	1.000	1.000
FG487_3&FG788_2	0.472	0.201	1.000	0.787
FG762_7&MS428_6	0.474	0.701	0.302	0.755
FG524_2&FG716_4	0.475	1.000	0.112	1.000
FG698_1&FG894_7	0.479	0.867	1.000	1.000
FG686_3&MS413_2	0.480	0.441	0.005	0.245
FG487_3&FG686_3	0.486	0.796	0.050	0.031
MS400_3&MS481_16	0.487	0.501	0.541	0.341
FG686_3&MS481_16	0.488	0.619	0.886	0.017
FG529_5&FG716_4	0.489	0.147	0.734	0.463
FG529_5&FG735_16	0.492	0.603	0.484	0.617
FG652_20&MS441_4	0.492	0.768	0.344	0.635
FG762_7&MS452_7	0.495	0.984	0.794	0.913
FG735_16&MS400_3	0.498	0.791	0.185	0.215
FG652_20&FG848_7	0.502	1.000	0.689	0.175

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG529_5&MS413_2	0.503	0.250	0.179	0.224
FG524_2&MS441_4	0.517	1.000	0.352	1.000
FG788_2&MS452_7	0.518	1.000	1.000	0.388
FG735_16&MS428_6	0.520	0.555	0.773	0.397
FG529_5&FG698_1	0.523	0.546	0.957	0.028
FG848_7&FG894_7	0.524	1.000	1.000	1.000
FG652_20&MS481_16	0.532	0.450	0.123	1.000
FG529_5&MS441_4	0.541	0.705	0.938	0.968
FG487_3&MS452_7	0.546	0.527	0.407	0.970
FG698_1&MS452_7	0.551	0.265	0.264	0.009
FG686_3&FG893_2	0.552	0.622	0.345	0.123
FG691_2&FG894_7	0.556	0.164	1.000	1.000
FG529_4&FG735_16	0.556	0.934	0.535	1.000
FG691_2&FG788_2	0.566	0.097	0.673	0.164
FG529_5&MS452_7	0.566	0.091	0.875	0.012
FG747_2&MS452_7	0.568	0.049	0.746	0.566
FG893_2&MS428_4	0.576	0.454	0.221	0.777
FG652_20&FG756_2	0.576	0.770	0.545	0.522
FG716_4&MS413_1	0.579	0.657	0.408	0.122
FG735_16&MS413_1	0.581	0.880	0.244	0.613
FG652_11&MS452_7	0.582	0.068	0.315	0.638
FG524_2&FG747_1	0.583	1.000	1.000	1.000
FG747_1&MS400_3	0.585	0.689	1.000	1.000
FG747_1&MS428_6	0.585	0.607	1.000	1.000
MS400_3&MS441_4	0.590	0.363	0.870	0.448
FG756_2&MS452_7	0.597	0.413	0.894	0.682
FG529_5&FG652_20	0.597	0.249	0.524	0.016
FG894_7&MS400_3	0.598	0.471	1.000	1.000
FG756_2&MS400_3	0.600	1.000	0.444	0.347
FG756_2&FG762_7	0.602	0.066	0.421	0.743
FG529_4&MS452_7	0.607	0.170	0.875	0.014
FG524_2&FG747_2	0.607	1.000	0.424	1.000
FG747_1&FG788_2	0.609	1.000	1.000	1.000
FG652_11&FG756_2	0.611	1.000	0.822	0.091
MS413_2&MS481_16	0.612	0.286	0.287	0.580
FG756_2&FG848_7	0.616	0.036	0.434	0.875
FG652_11&MS413_1	0.616	0.277	0.021	0.725
FG698_1&FG771_3	0.620	0.029	0.743	0.076
FG698_1&FG771_1	0.625	0.026	0.749	0.081
FG762_7&MS400_3	0.627	0.508	0.448	0.920
FG529_5&FG730_11	0.628	0.435	0.814	0.070
FG686_3&FG762_7	0.629	0.654	0.562	0.907
FG735_16&FG788_2	0.633	0.309	0.709	0.910
FG730_11&FG756_2	0.634	1.000	0.894	0.809
FG652_11&FG747_2	0.634	0.397	0.127	0.496
FG756_2&FG771_3	0.638	0.664	0.262	0.733
FG747_1&FG756_2	0.638	0.646	1.000	1.000
FG756_2&FG771_1	0.639	0.666	0.258	0.731

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG762_7&MS481_16	0.642	0.984	0.267	1.000
FG487_3&FG735_13	0.642	0.591	0.312	0.073
FG747_2&MS400_3	0.644	0.529	0.817	0.794
MS413_1&MS428_4	0.647	1.000	0.402	1.000
FG698_1&MS413_2	0.649	0.713	0.899	0.890
FG487_3&MS428_6	0.656	0.667	0.680	1.000
FG686_3&MS441_4	0.657	0.557	0.093	0.008
FG762_7&FG893_2	0.658	0.721	0.241	0.555
FG730_11&FG735_13	0.663	0.004	0.415	0.859
MS413_1&MS481_16	0.663	0.406	0.807	1.000
FG762_7&MS441_4	0.666	0.440	0.551	0.891
FG691_2&FG735_13	0.672	0.656	0.777	0.455
FG747_1&FG848_7	0.677	0.100	1.000	1.000
FG529_4&FG652_11	0.678	0.082	0.034	0.750
FG730_11&FG762_7	0.684	0.096	0.830	0.077
FG652_20&FG762_7	0.685	0.264	0.070	0.761
FG529_4&FG691_2	0.686	0.092	0.089	0.016
FG716_4&MS400_3	0.691	0.133	0.248	0.501
FG524_2&FG894_7	0.693	1.000	1.000	1.000
FG747_1&MS413_2	0.695	0.719	1.000	1.000
FG698_1&FG893_2	0.707	0.247	0.178	0.103
FG788_2&MS428_6	0.709	0.626	0.672	0.416
FG524_2&FG529_4	0.718	0.357	0.328	0.047
FG893_2&FG894_7	0.718	0.000	1.000	1.000
FG698_1&FG747_2	0.719	0.045	0.782	1.000
FG747_2&FG756_2	0.719	0.566	0.006	0.780
FG691_2&FG747_1	0.724	1.000	1.000	1.000
FG848_7&MS413_2	0.725	0.905	0.988	0.251
FG524_2&FG788_2	0.729	0.315	0.629	1.000
FG524_2&MS452_7	0.734	0.409	0.649	0.109
FG529_4&FG762_7	0.739	0.346	0.963	0.768
FG524_2&FG698_1	0.743	0.407	0.793	0.062
FG747_1&FG762_7	0.754	1.000	1.000	1.000
FG762_7&FG788_2	0.757	0.060	1.000	0.405
FG716_4&MS428_6	0.757	0.220	0.264	0.753
FG771_3&MS452_7	0.758	0.668	0.111	1.000
FG735_16&FG747_1	0.760	0.689	1.000	1.000
FG848_7&MS428_6	0.761	0.002	0.628	0.589
FG771_1&MS452_7	0.761	0.667	0.106	1.000
FG730_11&FG735_16	0.772	0.652	0.782	0.978
FG529_5&FG893_2	0.773	0.150	0.709	0.882
FG747_2&FG894_7	0.778	0.214	1.000	1.000
FG691_2&FG716_4	0.778	0.850	0.349	0.785
FG487_3&MS481_16	0.780	0.954	0.854	0.461
FG529_5&FG652_11	0.783	0.113	0.677	0.059
FG487_3&FG747_1	0.792	0.001	1.000	1.000
FG771_1&FG894_7	0.792	0.257	1.000	1.000
FG756_2&MS441_4	0.794	1.000	0.882	0.363
FG771_3&FG894_7	0.794	0.253	1.000	1.000

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG691_2&FG747_2	0.794	0.384	1.000	0.205
FG747_1&FG894_7	0.794	1.000	1.000	1.000
MS428_4&MS441_4	0.797	0.458	0.281	0.869
FG747_2&MS441_4	0.797	0.122	0.537	0.128
FG529_5&FG756_2	0.803	0.856	0.084	0.680
FG652_20&FG735_16	0.807	0.038	0.468	0.790
FG487_3&FG735_16	0.811	0.292	0.898	0.718
FG529_4&FG735_13	0.813	0.098	0.877	1.000
FG529_4&FG894_7	0.825	0.073	1.000	1.000
FG529_4&FG716_4	0.827	0.117	0.570	0.436
FG735_16&FG747_2	0.827	0.186	0.853	0.592
FG487_3&MS413_1	0.830	0.074	0.388	0.696
FG716_4&FG762_7	0.835	0.562	0.265	0.669
FG771_3&MS413_2	0.835	0.379	0.163	0.728
FG652_11&MS428_4	0.835	1.000	0.799	0.057
FG698_1&FG716_4	0.836	0.204	0.068	0.347
FG771_1&MS413_2	0.837	0.366	0.166	0.728
FG652_20&FG771_3	0.842	0.638	0.624	0.761
FG747_2&FG762_7	0.842	0.186	0.302	0.367
FG686_3&FG756_2	0.843	0.816	0.248	0.495
FG652_20&FG771_1	0.843	0.644	0.621	0.769
FG893_2&MS400_3	0.846	0.035	0.824	1.000
FG691_2&MS452_7	0.851	0.577	0.868	0.105
MS452_7&MS481_16	0.852	0.645	0.326	0.035
FG848_7&MS400_3	0.853	0.072	0.396	0.541
FG691_2&FG698_1	0.856	0.008	0.622	0.076
FG652_20&FG698_1	0.863	0.818	0.234	0.252
FG652_11&FG747_1	0.863	0.410	1.000	1.000
FG730_11&FG894_7	0.865	1.000	1.000	1.000
FG893_2&MS452_7	0.868	0.610	0.423	0.940
FG747_2&MS428_6	0.872	1.000	0.711	0.184
FG691_2&FG893_2	0.880	0.187	0.465	0.592
FG788_2&MS413_2	0.883	1.000	1.000	1.000
FG788_2&MS441_4	0.884	0.541	0.101	0.293
MS413_1&MS441_4	0.890	0.557	0.765	1.000
MS400_3&MS452_7	0.898	0.828	0.910	0.207
FG747_1&MS413_1	0.909	0.329	1.000	1.000
FG716_4&FG894_7	0.913	0.095	1.000	1.000
FG686_3&FG894_7	0.921	1.000	1.000	1.000
FG487_3&FG894_7	0.922	0.085	1.000	1.000
FG686_3&MS413_1	0.924	0.019	0.582	0.280
FG747_2&MS481_16	0.924	0.241	0.088	0.866
FG652_11&FG771_3	0.927	0.524	0.201	0.352
FG529_4&FG893_2	0.928	0.219	0.883	0.626
FG652_11&FG771_1	0.929	0.525	0.190	0.348
FG529_5&FG788_2	0.930	0.449	1.000	0.680
FG771_1&FG848_7	0.936	0.174	1.000	0.902
FG771_3&FG848_7	0.936	0.174	1.000	0.903
FG691_2&FG762_7	0.937	0.340	0.282	0.150

Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG529_5&FG894_7	0.942	0.140	1.000	1.000
FG652_11&MS400_3	0.942	0.483	0.136	0.525
MS441_4&MS452_7	0.948	0.808	1.000	0.917
FG894_7&MS441_4	0.954	0.793	1.000	1.000
FG716_4&MS481_16	0.957	0.033	0.085	0.748
FG716_4&MS413_2	0.963	0.241	0.257	0.572
FG529_5&FG691_2	0.977	0.863	0.115	0.015
FG691_2&FG735_16	0.977	1.000	0.279	0.954
FG735_16&MS452_7	0.978	0.862	0.570	0.082
FG487_3&FG652_20	0.982	0.202	0.843	0.720
FG691_2&MS481_16	0.984	1.000	1.000	0.878
FG735_16&FG762_7	0.991	0.084	0.944	0.445
FG756_2&MS428_4	1.000	1.000	0.030	1.000
FG756_2&MS428_6	1.000	0.076	0.030	1.000
FG735_16&FG756_2	1.000	0.831	0.033	1.000
FG698_1&FG735_13	1.000	0.046	0.146	0.369
FG756_2&MS413_2	1.000	0.521	0.153	1.000
FG524_2&FG730_11	1.000	1.000	0.163	0.237
FG735_13&FG756_2	1.000	0.678	0.214	0.419
FG716_4&MS428_4	1.000	0.429	0.269	0.751
MS428_6&MS441_4	1.000	1.000	0.270	0.866
MS428_6&MS452_7	1.000	0.403	0.314	0.068
MS428_4&MS452_7	1.000	1.000	0.320	0.069
FG716_4&FG771_3	1.000	0.399	0.323	0.821
FG716_4&FG771_1	1.000	0.402	0.327	0.824
FG524_2&MS413_2	1.000	0.571	0.364	1.000
FG735_13&FG735_16	1.000	0.351	0.373	0.017
FG730_11&MS428_6	1.000	0.258	0.373	0.757
FG730_11&MS428_4	1.000	1.000	0.379	0.755
FG756_2&MS413_1	1.000	0.849	0.406	0.733
FG735_13&FG747_2	1.000	0.564	0.434	0.140
FG524_2&FG893_2	1.000	0.580	0.591	1.000
FG652_20&FG735_13	1.000	0.681	0.626	0.766
FG756_2&MS481_16	1.000	0.928	0.646	0.419
FG756_2&FG788_2	1.000	1.000	0.647	0.340
FG788_2&FG848_7	1.000	0.327	0.667	0.104
FG788_2&MS428_4	1.000	1.000	0.669	0.414
FG735_13&FG788_2	1.000	0.600	0.671	0.669
FG487_3&MS428_4	1.000	0.531	0.683	1.000
FG747_2&MS428_4	1.000	0.349	0.711	0.185
FG524_2&FG735_16	1.000	0.337	0.734	0.469
FG529_4&FG756_2	1.000	0.704	0.768	0.904
FG691_2&FG756_2	1.000	1.000	0.774	0.408
FG735_16&MS428_4	1.000	0.448	0.776	0.397
FG652_20&MS428_6	1.000	1.000	0.787	0.239
FG524_2&MS413_1	1.000	0.608	0.789	1.000
FG652_11&MS428_6	1.000	0.490	0.796	0.056
FG735_13&FG893_2	1.000	0.856	0.879	0.785
FG716_4&FG735_13	1.000	0.045	0.884	0.977



Pairs of loci	31 SNP loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
FG735_13&FG771_3	1.000	0.078	1.000	0.900
FG735_13&FG771_1	1.000	0.078	1.000	0.905
FG735_13&MS413_1	1.000	0.180	1.000	0.131
FG691_2&FG771_1	1.000	0.202	1.000	0.535
FG691_2&FG771_3	1.000	0.203	1.000	0.528
FG756_2&FG894_7	1.000	0.251	1.000	1.000
FG524_2&FG756_2	1.000	0.281	1.000	1.000
FG487_3&FG756_2	1.000	0.435	1.000	1.000
FG735_13&FG747_1	1.000	0.590	1.000	1.000
MS413_2&MS428_6	1.000	0.640	1.000	0.004
FG735_13&FG894_7	1.000	0.677	1.000	1.000
FG894_7&MS428_6	1.000	0.701	1.000	1.000
MS413_2&MS428_4	1.000	1.000	1.000	0.004
FG529_4&FG788_2	1.000	1.000	1.000	0.736
FG524_2&FG735_13	1.000	1.000	1.000	1.000
FG524_2&MS428_4	1.000	1.000	1.000	1.000
FG747_1&MS428_4	1.000	1.000	1.000	1.000
FG894_7&MS428_4	1.000	1.000	1.000	1.000
FG524_2&MS428_6	1.000	1.000	1.000	1.000

Pairs of loci	17 SSR loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
Arm02_Arm09	0.0000	0.0000	0.3988	0.0566
Arm05_Arm09	0.0000	0.0000	0.4489	0.3990
Arm02_Arm11	0.0000	0.0000	0.6707	0.6259
Arm05_Arm11	0.0000	0.0000	0.0818	0.4250
Arm09_Arm11	0.0000	0.0000	0.4158	0.4665
Arm02_Arm16	0.0000	0.0000	0.4922	0.9839
Arm05_Arm16	0.0000	0.0000	0.7905	0.4551
Arm11_Arm16	0.0000	0.0000	0.6778	0.2328
Arm16_AC31	0.0000	0.0000	0.3451	0.0287
Arm05_AC37	0.0000	0.0000	0.3845	0.2520
Arm16_AC37	0.0000	0.0000	0.3720	0.1680
AC18_AC37	0.0000	0.0000	0.0375	0.3643
AC18_AC12	0.0000	0.0000	0.4232	0.2781
Arm09_AC04	0.0000	0.0000	0.5251	0.1181
AC18_AC04	0.0000	0.0000	0.5548	0.4329
AC37_AC04	0.0000	0.0000	0.8141	0.9861
AC18_AC38	0.0000	0.0000	0.7402	0.3675
AC37_AC38	0.0000	0.0000	0.0395	0.5887
AC16_AC38	0.0000	0.0000	0.0645	0.2517
AC04_AC38	0.0000	0.0000	0.0783	0.9784
Arm05_AC22	0.0000	0.0000	0.0000	0.8158
Arm09_AC22	0.0000	0.0000	0.8329	0.3190
Arm11_AC22	0.0000	0.0000	0.1145	0.6738
Arm16_AC22	0.0000	0.0000	0.9064	0.1990
AC18_AC22	0.0000	0.0000	0.7449	0.6143
AC31_AC22	0.0000	0.0000	0.3458	0.2754
AC37_AC22	0.0000	0.0000	0.4139	0.7720
AC16_AC22	0.0000	0.0000	1.0000	0.5677
AC04_AC22	0.0000	0.0000	0.1498	0.1824
AC38_AC22	0.0000	0.0000	0.6177	0.6581
Arm16_AC12	0.0001	0.0000	0.3866	0.7324
AC37_AC16	0.0003	0.0000	0.0213	0.4554
AC12_AC22	0.0012	0.0000	0.9217	0.0631
Arm09_AC12	0.0014	0.0000	0.4135	0.5556
Arm09_Arm16	0.0019	0.0000	0.2939	0.6921
Arm09_AC37	0.0036	0.0000	0.1484	0.8344
Arm16_AC04	0.0054	0.0000	0.5265	0.0229
AC18_AC16	0.0082	0.0000	0.2752	0.8382

Pairs of loci	17 SSR loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
Arm09_AC31	0.0208	0.0000	0.2225	0.2766
Arm16_AC38	0.0278	0.0000	0.1954	0.8697
AC37_AC12	0.0304	0.0000	0.5634	0.1349
Arm11_AC12	0.0442	0.0000	0.4727	0.1518
Arm16_AC16	0.0648	0.0000	0.9177	0.9661
Arm05_AC12	0.1013	0.0000	0.1729	0.4941
Arm09_AC38	0.1100	0.0000	0.5268	0.9334
Arm02_AC22	0.1204	0.0000	0.9313	0.8346
Arm05_AC31	0.1554	0.0000	0.5787	0.6004
AC04_AC34	0.2050	0.0000	0.9041	0.6305
Arm15_AC12	0.2184	0.0000	0.0485	0.0691
Arm02_AC18	0.3156	0.0000	0.2230	0.0861
AC31_AC04	0.3942	0.0000	0.4529	0.1781
Arm09_AC16	0.4014	0.0000	0.1861	0.2257
Arm16_Arm15	0.4573	0.0000	0.8751	0.9061
AC31_AC38	0.5747	0.0000	0.8909	0.4614
Arm16_AC34	0.4164	0.0002	0.1308	0.6388
Arm11_AC18	0.4542	0.0003	0.1556	0.1070
Arm02_AC38	0.1806	0.0003	0.7402	0.4722
Arm09_AC18	0.0000	0.0014	0.5947	0.8960
AC16_AC04	0.0000	0.0078	0.8956	0.7062
AC31_AC37	0.0000	0.0181	0.5575	0.3980
Arm02_Arm05	0.0000	0.0498	0.6811	0.1581
Arm16_Am111	0.0000	0.0908	0.3367	0.3627
Arm05_Am109	0.0003	0.1036	0.4325	0.0277
AC37_AC34	0.0000	0.1082	0.3349	0.6656
Arm09_AC34	0.0000	0.1202	0.6757	0.4010
Arm02_Am111	0.0003	0.7687	0.4934	0.6466
Arm11_AC38	0.1856	0.0005	0.3562	0.8142
AC31_AC12	0.0542	0.0013	0.5955	0.3750
Arm16_AC18	0.0934	0.0015	0.7489	0.7499
AC12_AC34	0.3335	0.0026	0.5313	0.9679
Arm05_AC16	0.0705	0.0027	0.1633	0.2877
Arm02_AC37	0.0719	0.0042	0.9946	0.3939
Arm05_Arm15	0.1708	0.0043	0.8630	0.5376
Arm02_Arm15	0.2456	0.0049	0.7228	0.8375
Arm02_AC04	0.0041	0.0063	0.1855	0.7870
AC31_AC16	0.7266	0.0064	0.3587	0.5488
Arm11_AC34	0.0843	0.0077	0.5114	0.3938

Pairs of loci	17 SSR loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
Arm05_AC38	0.1434	0.0084	0.1036	0.6838
Arm11_AC31	0.7607	0.0093	0.9610	0.1331
Arm09_Am109	0.0595	0.0106	0.9876	0.9284
Arm11_Am109	0.1394	0.0109	0.3426	0.4001
AC12_AC04	0.0036	0.0119	0.4568	0.6461
Arm15_AC22	0.0998	0.0127	0.4629	0.5113
AC18_AC31	0.7867	0.0135	0.8441	0.5184
AC12_AC38	0.0126	0.0165	0.2310	0.9742
AC12_AC16	0.0573	0.0169	0.9693	0.1852
Arm05_Am111	0.2269	0.0205	0.0976	0.2774
Arm05_AC04	0.0068	0.0218	0.4168	0.4809
AC38_AC34	0.0635	0.0238	0.9858	0.9066
Arm11_AC04	0.1111	0.0241	0.6833	0.1973
Arm02_AC16	0.8822	0.0247	0.1738	0.9638
AC16_AC34	0.0236	0.0276	0.4823	0.4441
Arm11_AC16	0.2701	0.0297	0.0606	0.6946
Arm15_AC37	0.4804	0.0348	0.6325	0.7978
Arm11_Arm15	0.1719	0.0455	0.8881	0.7374
Arm15_AC16	0.6329	0.0519	0.8097	0.9986
Arm11_AC37	0.0388	0.0538	0.9244	0.8812
Arm15_AC18	0.2994	0.0554	0.3914	0.3547
AC22_AC34	0.0313	0.0737	0.1264	0.3283
Am111_AC12	0.0240	0.0875	0.9414	0.0113
Am111_AC37	0.1032	0.0904	0.8024	0.4015
Am109_AC18	0.0121	0.0927	0.2414	0.1891
Arm09_Am111	0.0117	0.1030	0.2342	0.6775
Am109_AC22	0.5859	0.1221	0.2869	0.2112
AC31_AC34	0.4638	0.1264	0.3654	0.7305
Arm02_AC34	0.3948	0.1549	0.6448	0.5299
Arm05_AC18	0.0014	0.1663	0.3799	0.3030
Arm02_AC12	0.5396	0.1730	0.8675	0.2711
AC18_AC34	0.1427	0.2007	0.9700	0.7546
Am111_AC31	0.7924	0.2188	0.1619	0.9599
Am111_AC18	0.2896	0.2507	0.7209	0.5238
Arm15_AC38	0.5880	0.2642	0.9142	0.7801
Am109_AC38	0.2619	0.2650	1.0000	0.0275
Arm02_AC31	0.7231	0.2807	0.4770	0.2807
Arm02_Am109	0.2558	0.2883	0.3509	0.2090
Am111_AC04	0.0248	0.2919	0.9705	0.3723
Am109_AC12	0.0784	0.3087	0.5840	0.5495

Pairs of loci	17 SSR loci			
	Carpathian subpopulations		Alpine subpopulations	
	Beech	Mixed/conifer	North	South
Am109_AC31	0.2209	0.3101	0.2105	0.1085
Arm15_AC31	0.0058	0.3291	0.1490	0.7347
Am111_AC16	0.8609	0.3298	0.8197	0.7423
Arm15_Am111	0.0051	0.3504	1.0000	0.8399
Arm05_AC34	0.2108	0.3909	0.7495	0.7638
Am111_AC38	0.0580	0.4631	0.2992	0.5796
Am109_AC37	0.5128	0.5015	0.1692	0.3178
Am111_AC34	0.4028	0.5887	0.6328	0.4936
Arm16_Am109	0.0711	0.6167	0.5538	0.7656
Am111_AC22	0.1541	0.6273	0.5536	0.5393
Arm11_Am111	0.6808	0.7095	0.6357	0.4515
Arm09_Arm15	0.0010	0.7276	0.1611	0.1535
Am109_AC04	0.3046	0.8572	0.1370	0.8045
Arm15_AC04	0.2863	0.8740	0.0742	0.1066
Am109_AC34	0.3189	0.8958	0.1047	0.6285
Arm15_Am109	0.0280	1.0000	0.3208	0.5802
Am109_AC16	0.2328	1.0000	0.2935	0.9899
Am109_Am111	0.8403	1.0000	0.5744	0.3341
Arm15_AC34	1.0000	1.0000	0.9064	0.0896