Supplementary Table S1. The studied populations of *P.sylvestris* used in ISSR analysis.

Population	Location	Coordinates
PS_KOCh	Perm Krai, Kochyovo's forestry	N: 59.614878 E: 54.438009
PS_SOSN	Perm Krai, Gainy's forestry	N: 60.341429 E: 53.840531
PS_KISH	Perm Krai, Kishert's forestry	N: 57.359558 E: 57.171923
PS_LENI	Perm Krai, Kudymkar's forestry	N: 58.692572 E: 54.694052
PS_ChER	Perm Krai, Cherdyn's forestry	N: 60.433611 E: 56.307557
PS_ROMA	Perm Krai, Berezniki's forestry	N: 59.146163 E: 56.794847
PS_LOKC	Komi Republic, Lokchim's forestry	N: 61.349444 E: 51.912500
PS_SYSO	Komi Republic, Sysolsky's forestry	N: 61.013889 E: 49.907500
PS_KRAS	Arkhangelsk Oblast, Krasnoborsk's forestry	N: 61.530278 E: 45.945556
PS_VELI	Vologda Oblast, Velikoustyugsky's forestry	N: 60.450556 E: 46.045000
PS_PYSH	Kostroma Oblast, Pyshchugsky's forestry	N: 58.833611 E: 45.694167
PS_UREN	Nizhny Novgorod Oblast, Urensky's forestry	N: 57.434167 E: 45.838611
PS_KORO	Mari El Republic, Korotni's forestry	N: 56.638611 E: 46.204722
PS_KOKSh	Mari El Republic, Kokshaysk's forestry	N: 56.251944 E: 47.589722
PS_KIRS	Chuvash Republic, Kirsk's forestry	N: 55.086944 E: 46.882500
PS_INZE	Ulyanovsk Oblast, Inzensky's forestry	N: 53.876111 E: 46.388056
PS_SHAB	Kirov Oblast, Shabalinsky's forestry	N: 58.752500 E: 47.267222
PS_YEZH	Kirov Oblast, Yezhikhinsk's forestry	N: 58.058056 E: 47.703889
PS_DARO	Kirov Oblast, Darovskoy's forestry	N: 58.756111 E: 48.122778
PS_YURY	Kirov Oblast, Yuryansky's forestry	N: 59.084444 E: 49.290278
PS_SLOB	Kirov Oblast, Slobodskoy's forestry	N: 58.738056 E: 50.075278
PS_BELO	Kirov Oblast, Belokholunitsky,s forestry	N: 58.771667 E: 50.943333

International geographical latitude designations: N - northern latitude; E - Eastern longitude

Supplementary Table S2. Pairwise geographic distances (km) between the studied populations of *P. sylvestris*. PS_KOCh, PS_SOSN, PS_KISH, PS_LENI, PS_ChER, PS_ROMA, PS_LOKC, PS_SYSO, PS_KRAS, PS_VELI, PS_PYSH, PS_UREN, PS_KORO, PS_KOKSh, PS_KIRS, PS_INZE, PS_SHAB, PS_YEZH, PS_DARO, PS_YURY, PS_SLOB - population designations.

PS_KOCh	PS_SOSN	PS_KISH	PS_LENI	PS_ChER	PS_ROMA	PS_LOKC	PS_SYSO	PS_KRAS	PS_VELI	PS_PYSH	PS_UREN	PS_KORO	PS_KOKSh	PS_KIRS	PS_INZE	PS_SHAB	PS_YEZH	PS_DARO	PS_YURY	PS_SLOB	
87	0																				PS_SOSN
297	383	0																			PS_KISH
104	190	208	0																		PS_LENI
138	136	345	214	0																	PS_ChER
143	212	200	131	146	0																PS_ROMA
237	153	534	333	259	364	0															PS_LOKC
294	227	579	371	354	434	114	0														PS_SYSO
510	446	784	578	571	652	318	219	0													PS_KRAS
475	428	724	524	562	618	333	219	120	0												PS_VELI
505	488	693	519	622	636	444	337	300	181	0											PS_PYSH
419	410	602	429	542	548	387	291	317	201	91	0										PS_UREN
424	432	567	413	555	540	435	351	398	282	145	81	0									PS_KORO
554	561	678	539	686	667	554	460	456	336	156	169	131	0								PS_KOKSh
585	605	668	554	721	684	617	531	544	424	246	243	182	91	0							PS_KIRS
550	583	596	504	688	634	619	546	594	475	309	279	201	169	95	0						PS_INZE
677	715	684	621	815	748	756	682	719	598	423	408	334	269	178	137	0					PS_SHAB
804	847	779	740	941	865	893	821	852	731	553	545	472	397	307	275	138	0				PS_YEZH
372	367	554	379	497	499	357	270	331	222	140	49	81	199	262	280	415	553	0			PS_DARO
298	291	499	313	420	428	290	217	328	237	208	122	147	273	327	331	468	606	76	0		PS_YURY
267	277	445	267	398	388	308	253	385	296	253	162	157	288	328	314	450	586	113	59	0	PS_SLOB
220	239	398	217	354	338	292	256	413	333	302	212	205	335	368	344	478	612	163	101	50	PS_BELO

Supplementary Table S3. Paired *PhiPT* genetic distances between the studied populations of *P. sylvestris* by AMOVA. *PS_KOCh, PS_SOSN, PS_KISH, PS_LENI, PS_ChER, PS_ROMA, PS_LOKC, PS_SYSO, PS_KRAS, PS_VELI, PS_PYSH, PS_UREN, PS_KORO, PS_KOKSh, PS_KIRS, PS_INZE, PS_SHAB, PS_YEZH, PS_DARO, PS_YURY, PS_SLOB* - population designations.

PS_KOCh	PS_SOSN	PS_KISH	PS_LENI	PS_ChER	PS_ROMA	PS_LOKC	PS_SYSO	PS_KRAS	PS_VELI	PS_PYSH	PS_UREN	PS_KORO	PS_KOKSh	PS_KIRS	PS_INZE	PS_SHAB	PS_YEZH	PS_DARO	PS_YURY	PS_SLOB	
0.140																					PS_SOSN
0.081	0.137																				PS_KISH
0.250	0.306	0.291																			PS_LENI
0.227	0.267	0.257	0.093																		PS_ChER
0.235	0.269	0.242	0.086	0.132																	PS_ROMA
0.595	0.615	0.606	0.585	0.543	0.591																PS_LOKC
0.625	0.637	0.629	0.620	0.576	0.619	0.271															PS_SYSO
0.560	0.587	0.568	0.555	0.512	0.559	0.250	0.310														PS_KRAS
0.574	0.601	0.588	0.559	0.523	0.567	0.296	0.356	0.145													PS_VELI
0.686	0.703	0.691	0.689	0.649	0.693	0.624	0.648	0.573	0.572												PS_PYSH
0.701	0.722	0.706	0.704	0.662	0.701	0.647	0.675	0.599	0.599	0.378											PS_UREN
0.689	0.717	0.697	0.702	0.661	0.705	0.643	0.676	0.582	0.590	0.556	0.539										PS_KORO
0.675	0.694	0.679	0.686	0.647	0.689	0.647	0.669	0.587	0.606	0.547	0.539	0.267									PS_KOKSh
0.629	0.645	0.633	0.625	0.593	0.626	0.595	0.620	0.554	0.561	0.649	0.665	0.625	0.610								PS_KIRS
0.639	0.657	0.645	0.641	0.602	0.643	0.605	0.617	0.571	0.569	0.683	0.703	0.665	0.651	0.207							PS_INZE
0.589	0.615	0.598	0.586	0.561	0.601	0.583	0.606	0.530	0.574	0.615	0.620	0.615	0.603	0.495	0.514						PS_SHAB
0.641	0.667	0.659	0.652	0.621	0.656	0.635	0.652	0.574	0.620	0.715	0.731	0.693	0.676	0.578	0.589	0.391					PS_YEZH
0.513	0.539	0.516	0.525	0.501	0.519	0.557	0.562	0.509	0.524	0.580	0.596	0.596	0.589	0.512	0.529	0.494	0.579				PS_DARO
0.515	0.535	0.512	0.515	0.494	0.503	0.568	0.563	0.519	0.545	0.607	0.624	0.637	0.624	0.556	0.573	0.536	0.602	0.144			PS_YURY
0.544	0.560	0.530	0.553	0.530	0.544	0.554	0.563	0.517	0.544	0.616	0.628	0.626	0.618	0.546	0.562	0.513	0.597	0.241	0.266		PS_SLOB
0.512	0.522	0.492	0.510	0.489	0.497	0.537	0.535	0.504	0.525	0.610	0.622	0.621	0.613	0.513	0.523	0.513	0.580	0.248	0.215	0.162	PS_BELO

Supplementary Table S4. Pairwise genetic distances (D_N) between the populations studied *Pinus sylvestris* L. *PS_KOCh, PS_SOSN, PS_KISH, PS_LENI, PS_ChER, PS_ROMA, PS_LOKC, PS_SYSO, PS_KRAS, PS_VELI, PS_PYSH, PS_UREN, PS_KORO, PS_KOKSh, PS_KIRS, PS_INZE, PS_SHAB, PS_YEZH, PS_DARO, PS_YURY, PS_SLOB* - population designations.
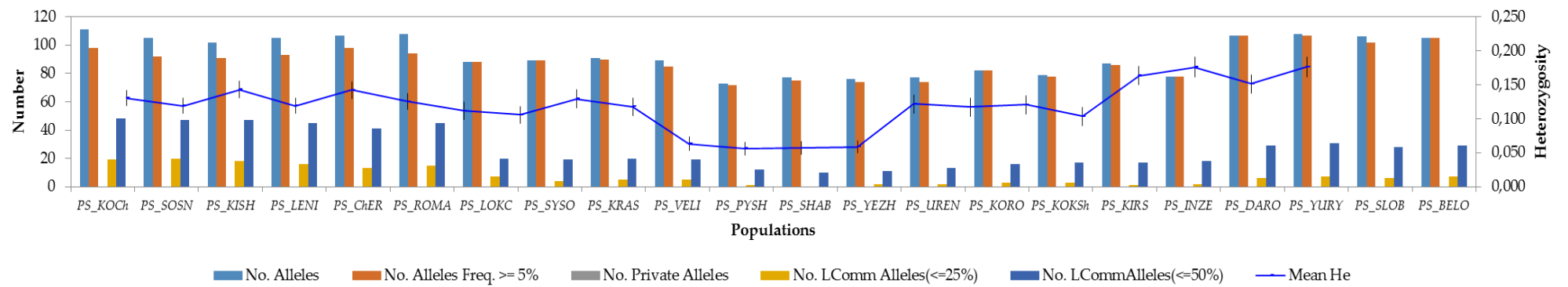
PS_KOCh	PS_SOSN	PS_KISH	PS_LENI	PS_ChER	PS_ROMA	PS_LOKC	PS_SYSO	PS_KRAS	PS_VELI	PS_PYSH	PS_UREN	PS_KORO	PS_KOKSh	PS_KIRS	PS_INZE	PS_SHAB	PS_YEZH	PS_DARO	PS_YURY	PS_SLOB	
0.022	0.000																				PS_SOSN
0.012	0.022	0.000																			PS_KISH
0.045	0.051	0.048	0.000																		PS_LENI
0.036	0.041	0.037	0.018	0.000																	PS_ChER
0.044	0.046	0.040	0.016	0.024	0.000																PS_ROMA
0.235	0.240	0.239	0.220	0.198	0.236	0.000															PS_LOKC
0.274	0.268	0.270	0.258	0.230	0.269	0.056	0.000														PS_SYSO
0.208	0.220	0.207	0.199	0.178	0.210	0.058	0.076	0.000													PS_KRAS
0.207	0.220	0.210	0.195	0.178	0.209	0.065	0.081	0.018	0.000												PS_VELI
0.292	0.295	0.291	0.283	0.260	0.302	0.213	0.242	0.182	0.174	0.000											PS_PYSH
0.313	0.322	0.310	0.293	0.274	0.307	0.235	0.274	0.208	0.202	0.055	0.000										PS_UREN
0.287	0.306	0.289	0.282	0.262	0.300	0.219	0.269	0.191	0.192	0.111	0.095	0.000									PS_KORO
0.283	0.291	0.281	0.277	0.259	0.295	0.244	0.280	0.199	0.211	0.118	0.104	0.023	0.000								PS_KOKSh
0.239	0.244	0.241	0.231	0.210	0.241	0.219	0.242	0.194	0.193	0.208	0.222	0.192	0.191	0.000							PS_KIRS
0.241	0.246	0.243	0.230	0.208	0.245	0.225	0.230	0.195	0.189	0.234	0.255	0.217	0.217	0.037	0.000						PS_INZE
0.221	0.230	0.226	0.215	0.205	0.240	0.196	0.231	0.165	0.189	0.179	0.187	0.180	0.179	0.154	0.160	0.000					PS_SHAB
0.249	0.254	0.261	0.251	0.236	0.268	0.224	0.249	0.186	0.212	0.260	0.281	0.210	0.203	0.172	0.170	0.082	0.000				PS_YEZH
0.177	0.191	0.182	0.185	0.178	0.189	0.252	0.267	0.208	0.203	0.223	0.240	0.227	0.228	0.187	0.189	0.184	0.231	0.000			PS_DARO
0.172	0.185	0.170	0.171	0.167	0.169	0.255	0.261	0.209	0.213	0.252	0.280	0.277	0.271	0.227	0.225	0.223	0.253	0.045	0.000		PS_YURY
0.196	0.199	0.187	0.200	0.192	0.200	0.211	0.227	0.196	0.204	0.231	0.242	0.237	0.234	0.202	0.210	0.192	0.236	0.088	0.094	0.000	PS_SLOB
0.155	0.157	0.146	0.149	0.146	0.145	0.198	0.207	0.178	0.183	0.247	0.256	0.247	0.245	0.179	0.176	0.191	0.222	0.085	0.073	0.050	PS_BELO

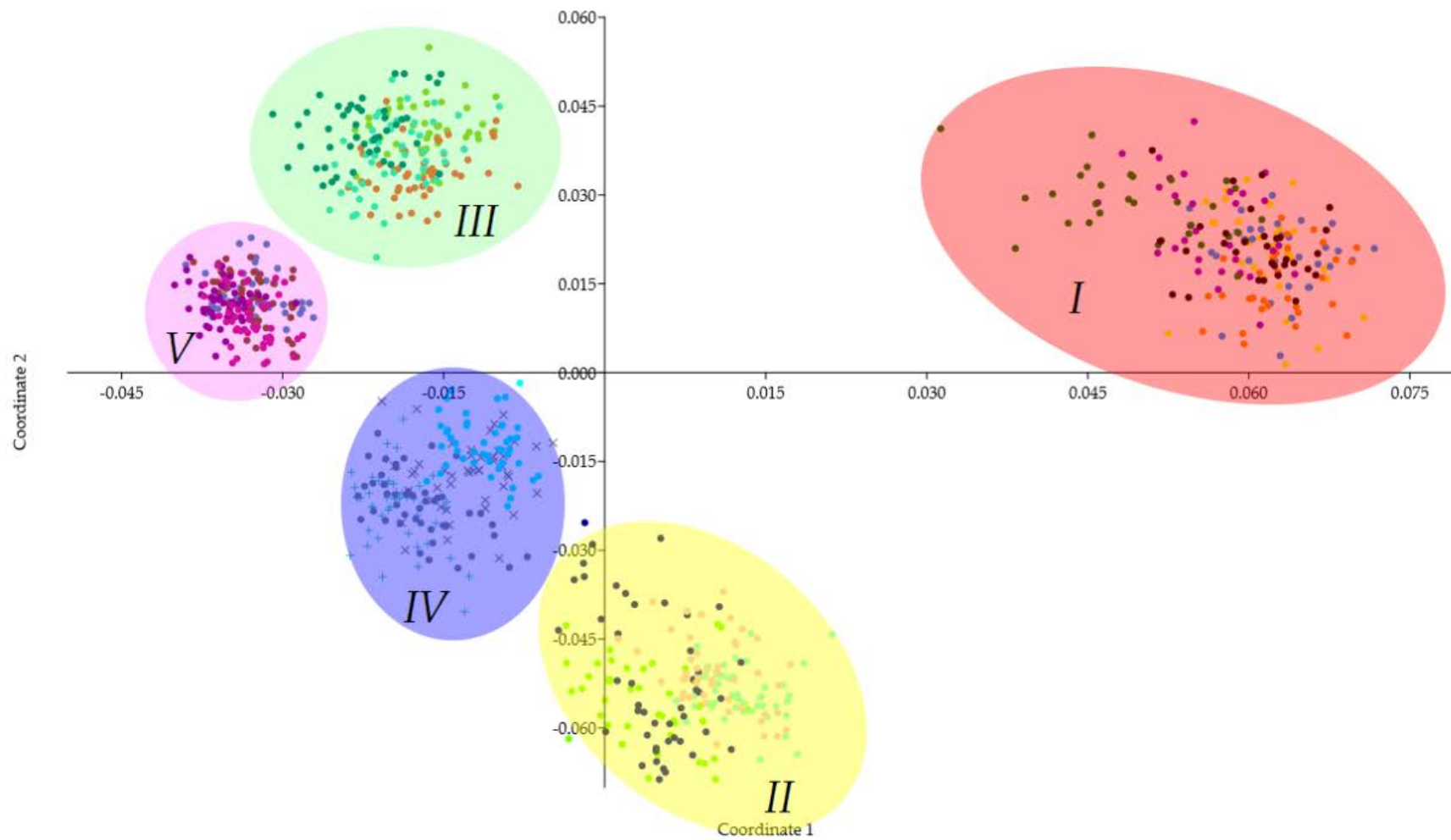**Supplementary Table S5.** Regression analysis of genetic and geographical distances.

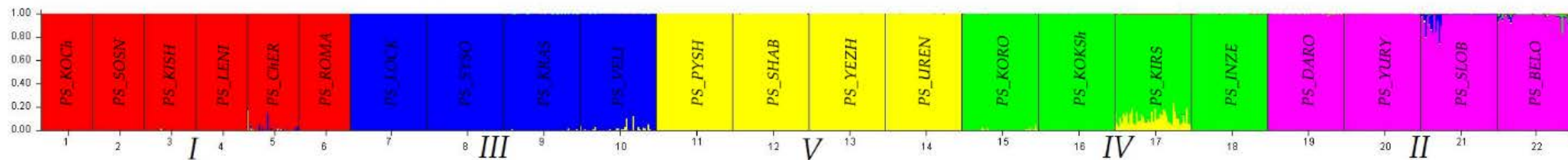| Regression statistics	
Multiple R	0.503437
R-square	0.253449
Normalized R-square	0.250189
Standard error	0.061977
Observations	231
Significance F	3.02E-16

Supplementary Figure S1. Schematic map of the location of the studied populations of *P. sylvestris*.
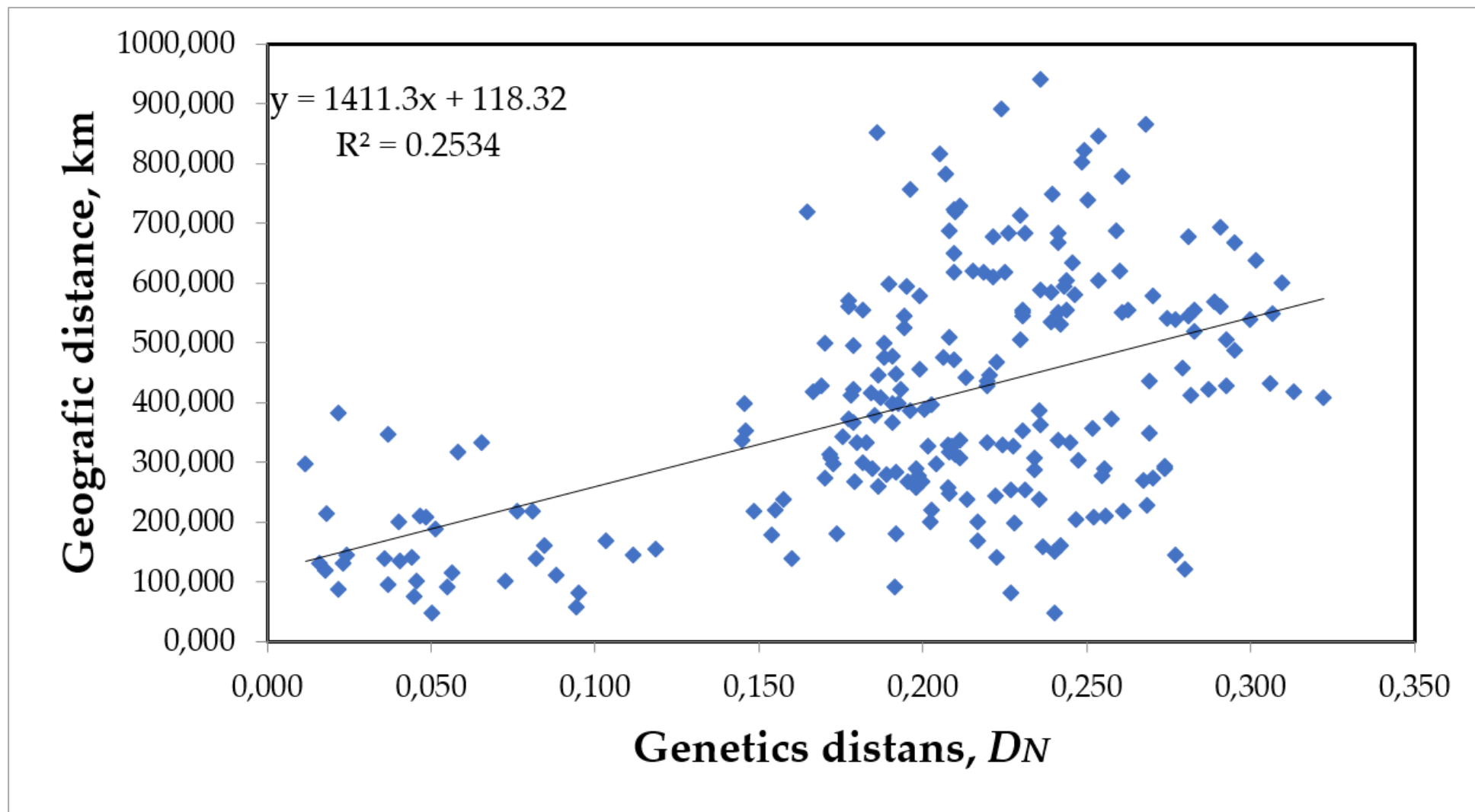
Supplementary Figure S2. Allele patterns of *P. sylvestris* populations.

Supplementary Figure S3. Ordination of the studied populations of *P. sylvestris* using PCA, obtained on the basis of PhiPT matrix of genetic distances.

Supplementary Figure S4. The structure of the distribution of genotypes in *P. sylvestris* populations at K=5; vertically - the proportion of allele frequencies of the corresponding cluster (posterior probability), horizontally - sample numbers.

Supplementary Figure S5. Graph of dependence of genetic (D_N) and geographical distances of *P. sylvestris* populations.