

Table S1. Genetic characteristics of *J. sabina* populations. N_{PL} – ploidy level, N – number of samples, N_G – number of distinct genetic individuals, A – mean number of alleles per locus, H_o – observed heterozygosity, H_s – gene diversity, G_{is} – inbreeding coefficient, P(HWE) – P value for HWE, * - statistically significant values after sequential Bonferroni's correction.

Country	Pops	Mountain range	Location		N _{PL}	N	N _G	A	H _o	H _s	G _{is}	P(HWE)	
			Lat (N)	Lon (W/E)									
EUROPE													
Spain	SP7	Cantabrians	42.88	-5.87	2n	20	18	4.6	0.35	0.48	0.26	0.005*	
Austria	AU3	Alps	47.11	13.46	2n	20	18	3.3	0.50	0.60	0.17	0.060	
	AU4		47.00	12.43	2n	20	15	3.3	0.38	0.48	0.22	0.024	
Romania	RO1	Carpathians	45.20	24.08	4n	19	16	4.0	0.40	0.58	0.31	<0.0001*	
	RO2	Apuseni	46.48	23.33	4n	20	20	5.6	0.42	0.64	0.34	<0.0001*	
	RO3	Carpathians	46.82	25.85	2n	20	13	5.3	0.41	0.67	0.38	<0.0001*	
Italy	IT1	Alps	45.68	7.16	2n	21	17	4.0	0.43	0.56	0.24	0.012	
	IT3		Apennines	42.10	14.18	4n	20	16	5.6	0.61	0.72	0.15	<0.0001*
	IT4			39.91	16.28	4n	20	16	5.6	0.46	0.72	0.36	<0.0001*
Croatia	CRO		44.24	15.81	4n	20	18	4.6	0.48	0.66	0.27	<0.0001*	
North Macedonia	NM	Balkans	41.59	20.66	4n	21	19	5.3	0.36	0.52	0.31	<0.0001*	
Greece	GR		41.14	22.24	4n	20	20	6.0	0.60	0.71	0.16	<0.0001*	
Bulgaria	BG		42.26	23.54	4n	20	19	5.6	0.56	0.66	0.14	<0.0001*	
Poland	PL*	Carpathians	49.40	20.42	2n	22	7	2.3	0.38	0.31	-0.22	0.323	
ASIA													
Georgia	GEO	Caucasus	42.37	42.62	2n	24	19	5.0	0.40	0.58	0.30	0.001*	
Kyrgyzstan	KYR	Tian-Shan	43.00	77.36	2n	28	13	4.0	0.34	0.46	0.25	0.060	
Overall						335	264	4.6	0.44	0.59	0.25	<0.0001*	

* Leaf samples were taken from the Kórnik Arboretum of the Institute of Dendrology of Polish Academy of Sciences.