

Table S1: Geographic coordinates, altitudes, bioclimatic variables and number of samples for eight studied *Acer tataricum* L. subsp. *tataricum* populations. Bioclimatic variables: BIO1 (Annual Mean Temperature); BIO2 (Mean Diurnal Range (Mean of monthly (max temp—min temp))); BIO3 (Iso-thermality (BIO2/BIO7) (×100)); BIO4 (Temperature Seasonality (standard deviation ×100)); BIO5 (Max Temperature of Warmest Month); BIO6 (Min Temperature of Coldest Month); BIO7 (Temperature Annual Range (BIO5-BIO6)); BIO8 (Mean Temperature of Wettest Quarter); BIO9 (Mean Temperature of Driest Quarter); BIO10 (Mean Temperature of Warmest Quarter); BIO11 (Mean Temperature of Coldest Quarter); BIO12 (Annual Precipitation); BIO13 (Precipitation of Wettest Month); BIO14 (Precipitation of Driest Month); BIO15 (Precipitation Seasonality (Coefficient of Variation)); BIO16 (Precipitation of Wettest Quarter); BIO17 (Precipitation of Driest Quarter); BIO18 (Precipitation of Warmest Quarter); BIO19 (Precipitation of Coldest Quarter). Populations: P1–Odransko polje; P2–Lipovljani; P3–Veliki Grđevac; P4–Mali Grđevac; P5–Grubišno Polje; P6–Virovitica; P7–Požega; P8–Županja.

Pop.	N	Longitude	Latitude	Altitude	Bioclimatic variables																		
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
P1	10	45.550000	16.375278	99	11.2	9.3	29.9	755.4	25.5	-5.7	31.2	20.2	3.3	20.2	1.5	893	90	52	17.8	255	165	255	174
P2	10	45.374722	16.829444	105	11.2	10.0	32.3	731.0	25.5	-5.4	30.9	20.0	3.6	20.0	1.9	918	93	54	16.1	263	175	263	183
P3	15	45.730556	17.071389	119	11.1	9.8	31.5	762.6	25.4	-5.9	31.3	20.3	3.2	20.3	1.2	842	92	46	19.7	255	153	255	159
P4	12	45.798056	17.182222	144	11.0	9.5	31.3	734.7	24.9	-5.6	30.5	19.8	3.3	19.8	1.5	818	91	44	20.8	252	146	252	154
P5	10	45.707500	17.230556	136	11.1	9.6	31.2	756.0	25.2	-5.6	30.8	20.3	3.3	20.3	1.4	848	95	46	20.4	260	154	260	159
P6	15	45.803611	17.366389	138	11.1	8.9	30.3	744.8	24.6	-4.8	29.4	20.1	3.4	20.1	1.6	797	92	42	22.1	249	140	249	148
P7	10	45.337778	17.571667	222	10.9	10.3	32.6	757.3	25.3	-6.3	31.6	20.0	3.0	20.0	1.3	860	100	50	19.4	259	160	259	171
P8	15	44.973611	18.817222	85	11.2	10.3	32.9	775.3	25.7	-5.6	31.3	19.2	3.2	20.6	1.5	733	94	43	22.7	234	135	234	147

Table S2: Pearson's correlation coefficients between analysed leaves' traits. Leaves' morphometric traits acronyms: leaf area (LA); leaf length (LL); maximum leaf width (MLW); leaf length, measured from the leaf base to the point of maximum leaf width (PMLW); leaf blade width at 50% (LW1) and 90% of leaf blade length (LW2); petiole length (PL); form coefficient (FC); angles enclosed by the main leaf vein (the centre of the leaf blade) and the line connecting the leaf blade base to a set point on the leaf margin, at 10% (LA10) and 25% (LA25). n.s. not significant at $p > 0.05$; * significant at $0.01 < p < 0.05$; ** significant at $0.001 < p < 0.01$; *** significant at $p < 0.001$

	LA	LL	MLW	PMLW	LW1	LW2	PL	FC	LA1	LA2
LA		***	***	***	***	***	***	**	**	**
LL	0.9010		***	***	***	***	***	n.s.	n.s.	n.s.
MLW	0.9543	0.7769		***	***	***	***	***	***	***
PMLW	0.7224	0.7436	0.6903		***	***	***	n.s.	n.s.	n.s.
LW1	0.9192	0.7193	0.9541	0.7535		***	***	***	***	***
LW2	0.7560	0.5276	0.7266	0.4884	0.7782		***	***	***	***
PL	0.7914	0.6631	0.7883	0.4503	0.6915	0.6290		***	***	***
FC	0.3375	0.0785	0.3558	-0.0397	0.3610	0.5438	0.4260		***	***
LA1	0.3021	-0.0774	0.4835	-0.1018	0.4456	0.3871	0.4340	0.5504		***
LA2	0.3253	-0.0748	0.5428	-0.0223	0.5037	0.4276	0.4437	0.5655	0.9402	

Table S3: Pearson's correlation coefficients between analysed fruit traits. Fruit morphometric traits acronyms: mericarp area (MA); mericarp length (ML); maximum mericarp width (MMW); length of the mericarp, measured from the basis to the point of maximum width (PMMW); width of mericarp at 90% of mericarp's length (MW90); nut length (NL); nut width (NW); angle enclosed by the wings (WA). n.s. not significant at $p > 0.05$; * significant at $0.01 < p < 0.05$; ** significant at $0.001 < p < 0.01$; *** significant at $p < 0.001$.

	MA	ML	MMW	PMMW	MW90	NL	NW	WA
MA		***	***	***	***	***	**	n.s
ML	0.882		***	***	***	***	***	n.s
MMW	0.935	0.702		***	***	***	*	n.s
PMMW	0.754	0.908	0.585		***	***	***	n.s
MW90	0.831	0.596	0.893	0.633		***	**	n.s
NL	0.618	0.698	0.505	0.686	0.491		***	n.s
NW	0.323	0.420	0.249	0.503	0.321	0.637		n.s
WA	-0.065	-0.073	-0.053	-0.021	-0.018	-0.081	-0.058	

Table S4: Pearson's correlation coefficients between analysed leaves and fruit traits. Leaves' morphometric traits acronyms: leaf area (LA); leaf length (LL); maximum leaf width (MLW); leaf length, measured from the leaf base to the point of maximum leaf width (PMLW); leaf blade width at 50% (LW1) and 90% of leaf blade length (LW2); petiole length (PL); form coefficient (FC); angles enclosed by the main leaf vein (the centre of the leaf blade) and the line connecting the leaf blade base to a set point on the leaf margin, at 10% (LA10) and 25% (LA25). Fruit morphometric traits acronyms: mericarp area (MA); mericarp length (ML); maximum mericarp width (MMW); length of the mericarp, measured from the basis to the point of maximum width (PMMW); width of the mericarp at 90% of the mericarp's length (MW90); nut length (NL); nut width (NW); angle enclosed by the wings (WA). n.s. not significant at $p > 0.05$; * significant at $0.01 < p < 0.05$; ** significant at $0.001 < p < 0.01$; *** significant at $p < 0.001$.

	LA	LL	MLW	PMLW	LW1	LW2	PL	FC	LA1	LA2
MA	0.274**	0.249*	0.229*	0.139 ^{n.s.}	0.252*	0.237*	0.218*	0.249*	0.027 ^{n.s.}	0.063 ^{n.s.}
ML	0.337**	0.300**	0.289**	0.258*	0.342**	0.306**	0.268**	0.292**	0.038 ^{n.s.}	0.082 ^{n.s.}
MMW	0.190 ^{n.s.}	0.169 ^{n.s.}	0.166 ^{n.s.}	0.062 ^{n.s.}	0.179 ^{n.s.}	0.150 ^{n.s.}	0.128 ^{n.s.}	0.160 ^{n.s.}	0.014 ^{n.s.}	0.055 ^{n.s.}
PMMW	0.338**	0.325**	0.301**	0.302**	0.340**	0.250*	0.252*	0.288**	-0.005 ^{n.s.}	0.063 ^{n.s.}
MW90	0.206*	0.205*	0.189 ^{n.s.}	0.097 ^{n.s.}	0.174 ^{n.s.}	0.097 ^{n.s.}	0.136 ^{n.s.}	0.172 ^{n.s.}	-0.004 ^{n.s.}	0.049 ^{n.s.}
NL	0.384***	0.366***	0.303**	0.226*	0.349**	0.374***	0.263*	0.340**	0.023 ^{n.s.}	0.047 ^{n.s.}
NW	0.190 ^{n.s.}	0.172 ^{n.s.}	0.164 ^{n.s.}	0.070 ^{n.s.}	0.168 ^{n.s.}	0.130 ^{n.s.}	0.036 ^{n.s.}	0.188 ^{n.s.}	0.060 ^{n.s.}	0.079 ^{n.s.}
WA	0.117 ^{n.s.}	0.087 ^{n.s.}	0.134 ^{n.s.}	0.112 ^{n.s.}	0.159 ^{n.s.}	0.093 ^{n.s.}	0.127 ^{n.s.}	0.021 ^{n.s.}	0.096 ^{n.s.}	0.067 ^{n.s.}