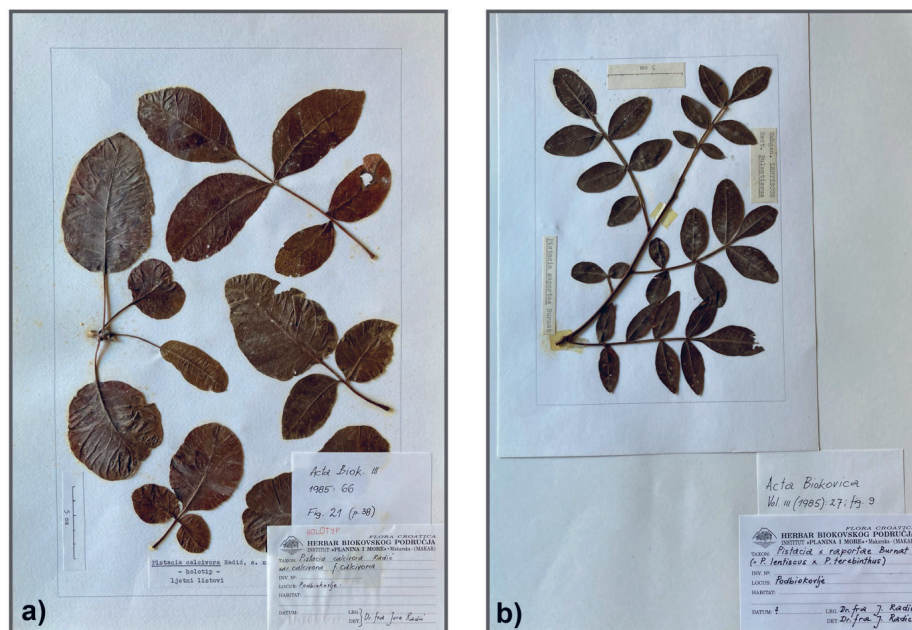
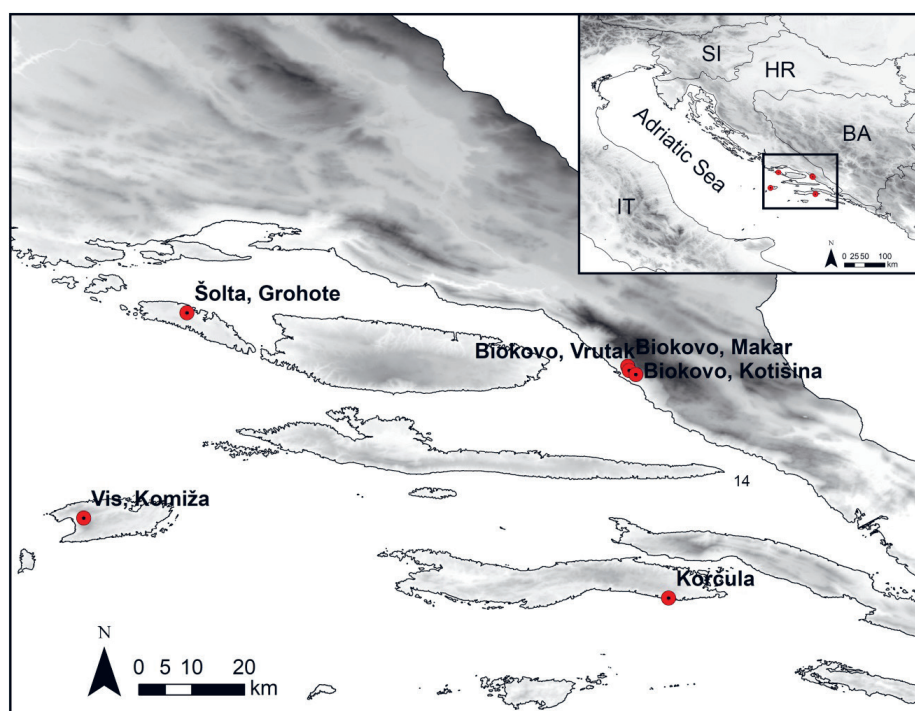


ON-LINE SUPPLEMENTARY MATERIAL

Temunović M., Šola Z., Jakšić V., Vidaković A., Liber Z., Poljak I., Bogdanović S.: Clarifying genetic and taxonomic relationships among *Pistacia* taxa (Anacardiaceae) in Croatia. Acta Bot Croat, DOI: 10.37427/botcro-2024-009



On-line Suppl. Fig. 1. Photo of the herbarium specimens of a) *Pistacia calcivora* and b) *Pistacia* × *saportae* collected by Radić in the area of Biokovo Mountain in 1985. Both specimens are from the herbarium collection “Herbarium of the Biokovo area” (MAKAR) in Makarska.



On-line Suppl. Fig. 2. Study area with the locations of the *Pistacia* populations sampled for this study in Croatia (eastern Adriatic).

On-line Suppl. Tab. 1 Descriptive statistics for analysed leaf morphological traits of the studied *Pistacia* populations. M – arithmetic mean; SD – standard deviation; CV – coefficient of variation (%). Analysed traits: LA – leaflet area; LL – leaflet length; MLW – maximal leaflet width; PMLW – leaflet length measured from the base to the point of maximum leaflet width; LW90 – leaflet width at 90% of leaflet length; FC – form coefficient; LA10 – angle enclosed by the main leaflet vein (the centre of leaflet blade) and the line connecting the leaflet base to a set point on the leaflet margin, at 10% of total leaflet length; RL – rachis length; PL – petiole length; NL – number of leaflets.

Trait	Descriptive parameter	Population ID												
		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
LA (cm ²)	M	1.40	2.11	5.02	1.54	4.58	6.30	3.07	1.50	6.39	5.97	5.73	7.27	1.00
	SD	0.52	0.84	2.44	0.55	1.69	2.14	1.84	0.62	2.08	2.69	2.00	3.39	0.37
	CV (%)	36.98	39.59	48.60	36.10	36.96	33.90	59.88	41.21	32.52	45.16	34.92	46.66	36.75
LL (cm)	M	2.37	2.43	4.02	2.59	3.98	4.13	3.01	2.50	4.18	4.06	4.18	4.06	2.02
	SD	0.53	0.57	0.99	0.52	0.83	0.75	1.04	0.47	0.94	0.91	0.83	0.95	0.32
	CV (%)	22.13	23.37	24.59	20.10	20.93	18.12	34.40	18.93	22.40	22.42	19.85	23.32	15.70
MLW (cm)	M	0.82	1.18	1.66	0.83	1.62	2.01	1.34	0.83	2.02	1.89	1.80	2.26	0.68
	SD	0.17	0.27	0.42	0.17	0.31	0.38	0.37	0.23	0.35	0.54	0.33	0.61	0.17
	CV (%)	20.52	22.52	25.08	20.90	19.01	18.70	27.21	28.18	17.41	28.69	18.28	26.92	24.78
PMLW (cm)	M	1.16	1.25	1.79	1.17	1.92	1.90	1.28	1.19	1.96	1.95	2.04	1.97	0.95
	SD	0.28	0.31	0.46	0.27	0.43	0.38	0.36	0.25	0.51	0.51	0.50	0.56	0.17
	CV (%)	23.93	24.36	25.57	23.06	22.46	20.20	28.31	21.10	25.93	26.03	24.44	28.50	17.45
LW90 (cm)	M	0.42	0.66	0.70	0.38	0.75	0.98	0.57	0.43	1.05	0.97	0.98	1.30	0.33
	SD	0.13	0.18	0.22	0.08	0.27	0.30	0.14	0.15	0.32	0.38	0.25	0.46	0.07
	CV (%)	30.15	27.19	30.53	22.34	35.51	30.93	24.52	34.13	30.15	39.75	25.27	35.87	21.30
FC	M	0.54	0.69	0.64	0.53	0.62	0.71	0.66	0.51	0.71	0.68	0.65	0.75	0.53
	SD	0.09	0.10	0.07	0.07	0.06	0.07	0.07	0.09	0.11	0.08	0.07	0.07	0.06
	CV (%)	16.56	14.87	11.04	14.01	9.38	10.06	10.47	18.60	14.99	11.91	10.21	8.85	10.46
LA10 (°)	M	31.49	38.69	42.16	32.64	32.90	49.20	44.20	31.24	47.34	43.42	41.79	49.83	33.27
	SD	6.42	6.63	6.63	5.24	3.95	6.87	8.84	6.03	7.09	7.40	6.25	6.95	3.64
	CV (%)	20.37	17.13	15.73	16.04	11.99	13.97	19.99	19.30	14.99	17.03	14.96	13.94	10.95
RL (cm)	M	5.02	4.85	7.99	6.37	8.31	8.46	6.63	5.92	8.34	8.34	8.53	8.48	4.58
	SD	1.07	1.03	2.18	1.53	1.41	1.91	1.74	1.01	1.73	1.61	2.12	2.03	0.70
	CV (%)	21.34	21.27	27.25	24.05	16.94	22.57	26.27	17.03	20.70	19.35	24.89	23.99	15.38
PL (cm)	M	2.80	6.11	3.63	7.08	3.23	4.12	6.93	6.67	6.53	6.83	6.71	6.68	2.91
	SD	1.36	2.22	1.56	2.39	1.85	2.21	2.52	2.20	2.86	2.64	2.41	3.10	1.44
	CV (%)	48.68	36.35	42.81	33.73	57.34	53.49	36.42	33.01	43.84	38.68	35.90	46.40	49.50
NL	M	7.60	8.07	8.30	7.66	8.64	8.02	7.44	7.24	7.18	7.08	7.61	5.94	7.49
	SD	1.94	1.49	2.08	1.24	1.90	1.60	1.45	1.48	1.98	1.58	1.90	1.49	1.28
	CV (%)	25.57	18.45	25.02	16.21	21.93	19.89	19.42	20.41	27.61	22.37	25.03	25.13	17.05

On-line Suppl. Tab. 2 Results of the Wilcoxon rank sum test. Analysed traits: LA – leaflet area; LL – leaflet length; MLW – maximal leaflet width; PMLW – leaflet length measured from the base to the point of maximum leaflet width; LW90 – leaflet width at 90% of leaflet length; FC – form coefficient; LA10 – angle enclosed by the main leaflet vein (the centre of leaflet blade) and the line connecting the leaflet base to a set point on the leaflet margin, at 10% of total leaflet length; RL – rachis length; PL – petiole length; NL – number of leaflets.

	<i>Pistacia × saportae</i>	<i>Pistacia calcivora</i>	<i>Pistacia lentiscus</i>
<i>Pistacia calcivora</i>	LA, LL, MLW, PMLW, LW90, LA10, PL, RL		
<i>Pistacia lentiscus</i>	NL, LA, FC, LL, MLW, PMLW, LW90, LA10, PL	NL, LA, FC, LL, MLW, PMLW, LW90, LA10, PL, RL	
<i>Pistacia terebinthus</i>	NL, LA, LL, MLW, PMLW, LW90, LA10, PL, RL	NL, LW90	LA, FC, LL, MLW, PMLW, LW90, LA10, PL, RL

On-line Suppl. Tab. 3 Pearson correlation coefficients between morphological traits and scores of the ten principal components. Analysed traits: LA – leaflet area; LL – leaflet length; MLW – maximal leaflet width; PMLW – leaflet length measured from the base to the point of maximum leaflet width; LW90 – leaflet width at 90% of leaflet length; FC – form coefficient; LA10 – angle enclosed by the main leaflet vein (the centre of leaflet blade) and the line connecting the leaflet base to a set point on the leaflet margin, at 10% of total leaflet length; RL – rachis length; PL – petiole length; NL – number of leaflets.

Trait	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
NL	0.211	0.645	0.715	0.124	0.074	-0.079	0.011	-0.017	0.003	0.001
LA	-0.980	0.078	-0.076	0.068	-0.052	-0.054	-0.064	-0.097	-0.049	-0.037
FC	-0.676	-0.626	0.310	0.063	0.068	0.110	0.181	-0.031	0.009	-0.015
LL	-0.906	0.346	-0.148	-0.021	-0.144	-0.082	0.071	-0.010	0.071	-0.015
MLW	-0.987	-0.088	0.000	0.077	-0.038	-0.003	-0.019	-0.077	0.002	0.060
PMLW	-0.893	0.310	-0.227	0.138	0.036	-0.068	0.143	0.091	-0.042	0.009
LW90	-0.907	-0.248	-0.057	0.223	0.191	-0.015	-0.152	0.046	0.032	-0.008
LA10	-0.698	-0.521	0.419	-0.135	-0.167	-0.099	-0.063	0.074	-0.013	0.002
PL	-0.869	0.194	0.007	-0.408	0.201	-0.024	0.003	-0.011	-0.001	0.002
RL	-0.817	0.490	0.128	-0.021	-0.091	0.249	-0.062	0.039	-0.005	-0.003
Eigenvalue	6.79	1.65	0.88	0.28	0.15	0.11	0.09	0.03	0.01	0.01
% Total	67.86	16.48	8.83	2.84	1.50	1.05	0.94	0.34	0.11	0.06
% Cumulative	67.86	84.34	93.17	96.01	97.50	98.56	99.50	99.84	99.94	100.00

On-line Suppl. Tab. 4 Results of the stepwise discriminant analyses for traits discriminating three genetic groups of *Pistacia* taxa. Analysed traits: LA – leaflet area; LL – leaflet length; MLW – maximal leaflet width; PMLW – leaflet length measured from the base to the point of maximum leaflet width; LW90 – leaflet width at 90% of leaflet length; FC – form coefficient; LA10 – angle enclosed by the main leaflet vein (the centre of leaflet blade) and the line connecting the leaflet base to a set point on the leaflet margin, at 10% of total leaflet length; RL – rachis length; PL – petiole length; NL – number of leaflets.

Trait	Wilks'	Partial	F-remove	p-value
LA10	0.1341	0.8541	8.2848	0.0005
LA	0.1335	0.8580	8.0241	0.0006
LL	0.1277	0.8972	5.5574	0.0052
PMLW	0.1204	0.9518	2.4550	0.0912
MLW	0.1204	0.9520	2.4480	0.0918
PL	0.1183	0.9683	1.5881	0.2096
LW90	0.1165	0.9831	0.8340	0.4374
RL	0.1156	0.9915	0.4167	0.6604
NL	0.1149	0.9972	0.1346	0.8742
FC	0.1147	0.9990	0.0464	0.9547