

Table S1. Sample size (N), geographic coordinates, altitudes, and bioclimatic variables for 12 studied *Salix triandra* populations. Bioclimatic variables: BIO1 (Annual Mean Temperature); BIO2 (Mean Diurnal Range (Mean of monthly (max temp - min temp))); BIO3 (Isothermality (BIO2/BIO7) ($\times 100$)); BIO4 (Temperature Seasonality (standard deviation $\times 100$)); 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: P01 – Mirna; P02 – Gomirje; P03 – Perić most; P04 – Vitunj; P05 – Dobra mlin; P06 – Zagorska Mrežnica north; P07 – Sabljaci; P08 – Zagorska Mrežnica south; P09 – Lonjsko polje; P10 – Narta; P11 – Jelas polje; P12 – Županja.

| Pop. ID | N | Longitude | Latitude | Alt. | Bioclimatic variables | | | | | | | | | | | | | | | | | | |
|---------|---|-----------|----------|------|-----------------------|------|------|-------|------|------|------|------|-----|------|-----|------|-----|----|------|-----|-----|-----|-----|
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| P01 | 5 | 13.89053 | 45.37717 | 19 | 13.3 | 9.8 | 34.2 | 694.1 | 27.2 | -1.6 | 28.8 | 13.5 | 6.2 | 22.2 | 5.0 | 1015 | 119 | 58 | 21.8 | 327 | 203 | 236 | 222 |
| P02 | 7 | 15.11166 | 45.34141 | 352 | 9.4 | 10.2 | 34.4 | 697.2 | 23.2 | -6.3 | 29.5 | 9.7 | 2.1 | 18.0 | 0.8 | 1420 | 157 | 82 | 20.2 | 448 | 269 | 343 | 291 |
| P03 | 5 | 15.17695 | 45.31181 | 345 | 9.6 | 10.2 | 33.9 | 699.5 | 23.4 | -6.6 | 30.0 | 9.9 | 2.2 | 18.1 | 0.8 | 1383 | 153 | 80 | 19.7 | 434 | 265 | 334 | 285 |
| P04 | 5 | 15.15708 | 45.28980 | 339 | 9.5 | 10.3 | 34.4 | 697.2 | 23.4 | -6.6 | 30.0 | 9.8 | 2.2 | 18.0 | 0.8 | 1385 | 154 | 82 | 19.7 | 437 | 267 | 329 | 288 |
| P05 | 5 | 15.19702 | 45.26899 | 324 | 9.9 | 10.0 | 33.5 | 703.3 | 23.7 | -6.2 | 29.9 | 10.2 | 2.5 | 18.5 | 1.1 | 1353 | 151 | 80 | 19.7 | 427 | 261 | 323 | 282 |
| P06 | 5 | 15.22006 | 45.21881 | 321 | 9.6 | 10.4 | 35.1 | 697.1 | 23.6 | -6.1 | 29.7 | 10.0 | 2.4 | 18.2 | 1.0 | 1334 | 149 | 81 | 19.8 | 424 | 260 | 314 | 282 |
| P07 | 5 | 15.23078 | 45.23537 | 316 | 10.0 | 10.0 | 33.4 | 708.1 | 24.0 | -5.9 | 29.9 | 10.3 | 2.6 | 18.7 | 1.2 | 1334 | 148 | 80 | 19.7 | 423 | 258 | 318 | 280 |
| P08 | 6 | 15.22550 | 45.19699 | 329 | 9.5 | 10.5 | 35.7 | 692.9 | 23.4 | -6.1 | 29.5 | 9.8 | 2.3 | 18.0 | 1.0 | 1331 | 150 | 82 | 20.2 | 427 | 262 | 308 | 283 |
| P09 | 6 | 16.75400 | 45.36571 | 96 | 11.4 | 9.7 | 31.6 | 728.0 | 25.6 | -5.1 | 30.7 | 20.1 | 3.8 | 20.1 | 2.1 | 923 | 92 | 54 | 16.1 | 262 | 175 | 262 | 184 |
| P10 | 7 | 16.79538 | 45.82716 | 118 | 10.8 | 9.5 | 31.0 | 754.2 | 24.9 | -5.7 | 30.6 | 19.9 | 3.1 | 19.9 | 1.1 | 809 | 88 | 46 | 20.0 | 242 | 144 | 242 | 155 |
| P11 | 5 | 17.90477 | 45.11005 | 83 | 11.2 | 10.8 | 33.0 | 786.7 | 26.1 | -6.5 | 32.6 | 19.3 | 3.1 | 20.6 | 1.3 | 792 | 98 | 48 | 22.1 | 239 | 151 | 228 | 170 |
| P12 | 7 | 18.68389 | 45.08913 | 82 | 11.3 | 9.8 | 32.3 | 771.5 | 25.3 | -5.1 | 30.4 | 19.1 | 3.3 | 20.5 | 1.6 | 723 | 94 | 42 | 23.4 | 233 | 132 | 230 | 144 |

Table S2. Pearson correlation coefficients between altitude and 19 bioclimatic variables and scores of the first four principal components. Bioclimatic variables acronyms as in Table S1.

| Variable | PC—Principal Component | | | |
|------------------|------------------------|--------|--------|--------|
| | PC1 | PC2 | PC3 | PC4 |
| Altitude | -0.984 | 0.152 | 0.046 | -0.070 |
| BIO1 | 0.864 | -0.485 | -0.062 | 0.090 |
| BIO2 | -0.446 | 0.210 | -0.778 | 0.378 |
| BIO3 | -0.729 | -0.375 | -0.517 | 0.080 |
| BIO4 | 0.763 | 0.600 | -0.201 | -0.078 |
| BIO5 | 0.907 | -0.330 | -0.138 | 0.195 |
| BIO6 | 0.552 | -0.830 | 0.025 | -0.050 |
| BIO7 | 0.461 | 0.757 | -0.230 | 0.347 |
| BIO8 | 0.925 | 0.330 | 0.139 | 0.076 |
| BIO9 | 0.703 | -0.699 | -0.003 | 0.112 |
| BIO10 | 0.926 | -0.341 | -0.125 | 0.051 |
| BIO11 | 0.552 | -0.824 | -0.037 | 0.114 |
| BIO12 | -0.972 | -0.206 | 0.044 | 0.054 |
| BIO13 | -0.959 | -0.222 | -0.127 | -0.039 |
| BIO14 | -0.978 | -0.177 | 0.000 | 0.085 |
| BIO15 | 0.295 | -0.065 | -0.752 | -0.575 |
| BIO16 | -0.966 | -0.243 | -0.021 | -0.013 |
| BIO17 | -0.958 | -0.260 | 0.003 | 0.091 |
| BIO18 | -0.976 | 0.003 | 0.160 | 0.002 |
| BIO19 | -0.956 | -0.262 | -0.037 | 0.088 |
| Eigenvalue | 13.51 | 3.89 | 1.64 | 0.72 |
| % Total Variance | 67.53 | 19.45 | 8.19 | 3.61 |

Table S3. Results of the Fisher’s LSD test. Leaf morphometric traits: LA—leaf area; FC—form coefficient; LL—leaf length; MLW—maximum leaf width; PMLW—leaf length, measured from the leaf base to the point of maximum leaf width; LW2—leaf blade width at 90% of leaf blade length; LA1—angle closed by the main leaf vein (the centre of leaf blade) and the line connecting the leaf blade base to a set point on the leaf margin at 10% of total leaf blade length; LA2—angle closed by the main leaf vein (the centre of leaf blade) and the line connecting the leaf blade base to a set point on the leaf margin at 25% of total leaf blade length; and PL—petiole length. Population acronyms are as in Table S1

| Pop. | P01 | P02 | P03 | P04 | P05 | P06 | P07 | P08 | P09 | P10 | P11 |
|------|---|---|-------------------------------------|--------------------------------------|---|-------------------------------------|-------------------------------------|--|-------------------------------|---------------------------------------|------------------------|
| P02 | LA, LL, PMLW, LW2, LA1, LA2, PL | | | | | | | | | | |
| P03 | LA, LL, MLW, PMLW, LW2, LA1, PL | PL | | | | | | | | | |
| P04 | LA, LL, MLW, PMLW, LW2, LA1, PL | LA, LL, MLW, PL | LA, LL, MLW, PMLW, PL | | | | | | | | |
| P05 | LA, LL, MLW, PMLW, LW2, LA1, LA2, PL | | | LA, LL, MLW, PL | | | | | | | |
| P06 | LA, LL, PMLW, LW2, LA1, LA2 | PL | PL | LA, LL, MLW, PL | PL | | | | | | |
| P07 | LA, LL, MLW, PMLW, LW2, LA1 | | PL | LL, PL | | MLW | | | | | |
| P08 | LA, LL, PMLW, LW2, LA1, LA2, PL | | LA1, LA2 | LA, LL, MLW, LA1, LA2, PL | | PL | FC, LA1, LA2, PL | | | | |
| P09 | PMLW, LW2, LA1 | LA, FC, LL, PMLW, LA2 | LA, LL, PL | LA, FC, LL, MLW, PMLW, PL | LA, FC, LL | FC, LL, LA2 | LA, LL | LA, FC, LL, PMLW, LA1, LA2, PL | | | |
| P10 | LA, LL, MLW, PMLW, LW2, PL | FC, MLW, LA1, LA2 | PL | LA, FC, LL, PMLW, PL | FC, LL, LA1, LA2 | FC, MLW, LA1, LA2 | LL | FC, LL, PMLW, LW2, LA1, LA2, PL | LA, LL, MLW | | |
| P11 | LA, LL, MLW, PMLW, LA1, PL | LA, LL, MLW, PMLW, LW2, PL | LA, LL, MLW, PMLW, LW2, PL | LA, LL, MLW, PMLW, LW2, PL | LA, LL, MLW, PMLW, LW2, PL | LA, LL, MLW, PMLW, LW2, PL | LA, LL, MLW, PMLW, LW2, PL | LA, FC, LL, MLW, PMLW, LW2, PL | LA, LL, MLW, LW2, PL | LA, LL, MLW, PMLW, LW2, LA2, PL | |
| P12 | LA, LL, LW2, LA1 | LA, FC, LL, MLW, PMLW, LA2, PL | LA, LL, MLW, PMLW, PL | LA, FC, LL, MLW, PMLW, LW2, PL | LA, FC, LL, MLW, PMLW, LA2, PL | LA, FC, LL, PMLW, LA2 | LA, LL, MLW, PMLW, PL | LA, FC, LL, MLW, PMLW, LA1, LA2, PL | LA, LL, MLW, PL | LA, LL, MLW, PMLW, LW2, PL | LA, MLW, LW2, PL |

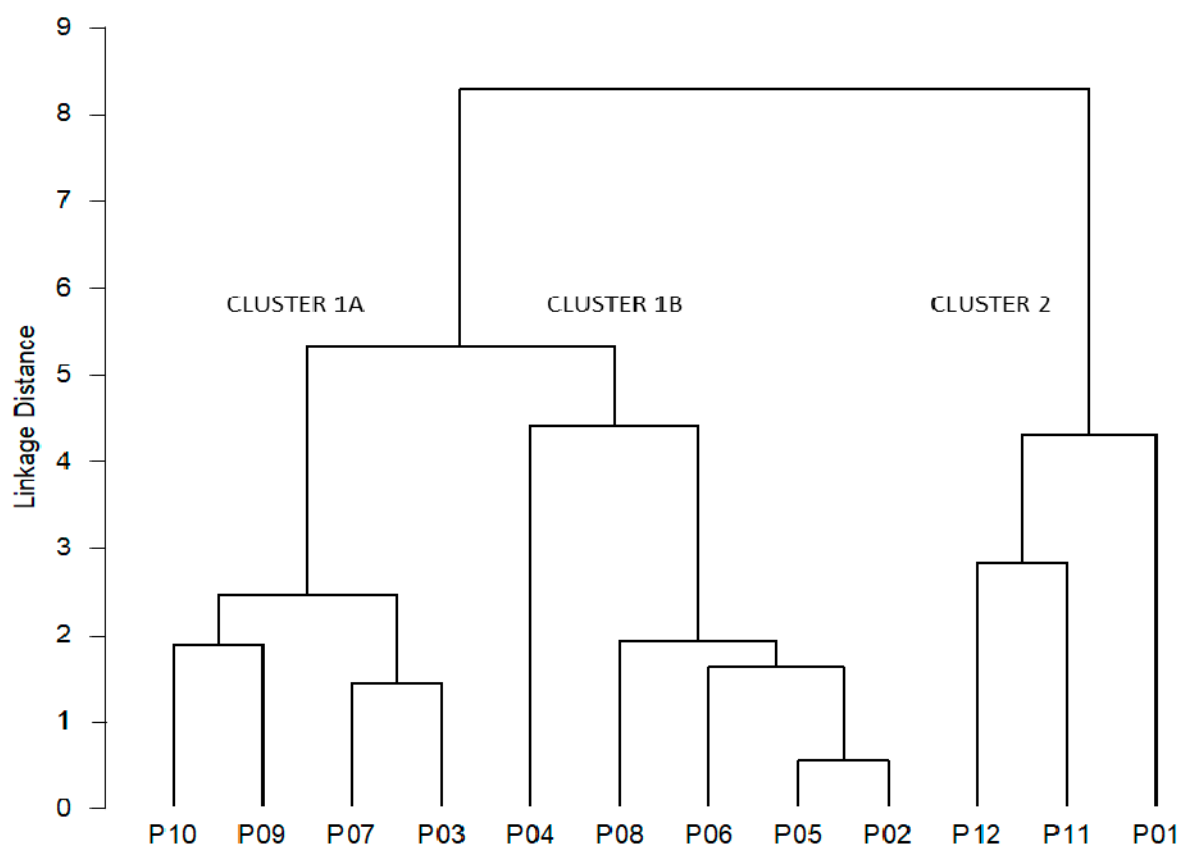


Figure S1. Tree diagram of researched 12 *Salix triandra* populations. The unweighted pair-group method with arithmetic mean (UPGMA) was used to join the clusters, and the Euclidean distance to define the distance between the studied populations. Population acronyms are as in Table S1.

Table S4. Results of the stepwise discriminant analyses for studied morphometric traits.

| Trait | Wilks' | Partial | F-remove | p-value |
|--|----------|----------|----------|----------|
| Leaf area (LA) | 0.007498 | 0.592386 | 3.002565 | 0.004085 |
| Form coefficient (FC) | 0.006478 | 0.685626 | 2.000820 | 0.049239 |
| Leaf length (LL) | 0.007433 | 0.597571 | 2.938649 | 0.004784 |
| Maximal leaf width (MLW) | 0.005397 | 0.823005 | 0.938441 | 0.513001 |
| Position of maximal leaf width (PMLW) | 0.008963 | 0.495532 | 4.442329 | 0.000134 |
| Leaf width at 90% of leaf length (LW2) | 0.005763 | 0.770708 | 1.298215 | 0.254518 |
| Leaf angle 1 (LA1) | 0.005668 | 0.783667 | 1.204589 | 0.309775 |
| Leaf angle 2 (LA2) | 0.007465 | 0.595025 | 2.969898 | 0.004428 |
| Petiole length (PL) | 0.008797 | 0.504926 | 4.278495 | 0.000194 |