

Table S1. Pearson correlations between photosynthetic parameters for Gelu variety in the first year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	0.123	1																	
CCI75	-0.292	-0.985	1																
CCI89	0.217	0.995	-0.997(*)	1															
PAR65	0.415	0.954	-0.991	0.978	1														
PAR75	-0.460	-0.938	0.983	-0.967	-0.999(*)	1													
PAR89	-0.714	0.607	-0.461	0.528	0.340	-0.293	1												
T _{leaf} 65	0.470	0.934	-0.981	0.964	0.998(*)	-1.000(**)	0.282	1											
T _{leaf} 75	0.562	0.890	-0.955	0.929	0.986	-0.993	0.177	0.994	1										
T _{leaf} 89	-0.358	-0.971	0.998(*)	-0.989	-0.998(*)	0.994	-0.398	-0.992	-0.973	1									
T _{ext} 65	0.999(*)	0.075	-0.245	0.170	0.371	-0.417	-0.747	0.427	0.522	-0.312	1								
T _{ext} 75	0.409	-0.855	0.754	-0.802	-0.660	0.622	-0.931	-0.613	-0.525	0.706	0.452	1							
T _{ext} 89	0.082	0.999(*)	-0.977	0.991	0.941	-0.923	0.639	0.918	0.870	-0.960	0.034	-0.876	1						
CO ₂ 65	0.123	1.000(**)	-0.985	0.995	0.954	-0.938	0.607	0.934	0.890	-0.971	0.075	-0.855	0.999(*)	1					
CO ₂ 75	1.000(**)	0.127	-0.296	0.221	0.419	-0.464	-0.711	0.474	0.566	-0.362	0.999(*)	0.405	0.086	0.127	1				
CO ₂ 89	-0.789	-0.707	0.818	-0.771	-0.887	0.909	0.134	-0.913	-0.952	0.856	-0.759	0.238	-0.677	-0.707	-0.792	1			
WUE 65	0.690	0.803	-0.893	0.856	0.945	-0.960	0.013	0.963	0.986	-0.923	0.655	-0.378	0.778	0.803	0.693	-0.989	1		
WUE 75	0.236	0.993	-0.998(*)	1.000(*)	0.982	-0.971	0.512	0.969	0.936	-0.992	0.189	-0.790	0.988	0.993	0.240	-0.783	0.866	1	
WUE 89	-0.282	0.918	-0.836	0.875	0.756	-0.722	0.873	0.714	0.635	-0.795	-0.327	-0.991	0.933	0.918	-0.277	-0.367	0.500	0.866	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations

Table S2. Pearson correlations between photosynthetic parameters for Moldova variety in the first year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	0.415	1																	
CCI75	-0.441	-1.000(*)	1																
CCI89	-0.555	-0.987	0.991	1															
PAR65	-0.462	-0.999(*)	1.000(*)	0.994	1														
PAR75	-0.940	-0.701	0.721	0.806	0.737	1													
PAR89	-0.974	-0.610	0.633	0.729	0.651	0.993	1												
T _{leaf} 65	-0.170	0.826	-0.809	-0.726	-0.795	-0.177	-0.057	1											
T _{leaf} 75	-0.435	0.639	-0.616	-0.508	-0.597	0.101	0.220	0.961	1										
T _{leaf} 89	-0.483	0.596	-0.573	-0.460	-0.553	0.155	0.273	0.945	0.999(*)	1									
T _{ext} 65	0.472	-0.606	0.583	0.471	0.564	-0.142	-0.261	-0.949	-0.999(*)	-1.000(**)	1								
T _{ext} 75	-0.934	-0.712	0.732	0.815	0.748	1.000(*)	0.991	-0.193	0.085	0.139	-0.126	1							
T _{ext} 89	-0.581	0.500	-0.475	-0.355	-0.454	0.267	0.381	0.901	0.986	0.993	-0.992	0.251	1						
CO ₂ 65	0.208	0.976	-0.970	-0.929	-0.964	-0.530	-0.424	0.929	0.790	0.756	-0.764	-0.543	0.676	1					
CO ₂ 75	0.278	-0.759	0.740	0.645	0.724	0.067	-0.053	-0.994	-0.986	-0.975	0.978	0.083	-0.944	-0.882	1				
CO ₂ 89	0.455	-0.622	0.599	0.489	0.580	-0.123	-0.241	-0.955	-1.000(*)	-0.999(*)	1.000(*)	-0.107	-0.989	-0.777	0.982	1			
WUE 65	0.235	0.982	-0.976	-0.939	-0.971	-0.554	-0.449	0.918	0.772	0.737	-0.746	-0.567	0.655	1.000(*)	-0.868	-0.759	1		
WUE 75	0.213	0.977	-0.971	-0.931	-0.965	-0.534	-0.429	0.927	0.787	0.752	-0.761	-0.548	0.672	1.000(**)	-0.879	-0.773	1.000(*)	1	
WUE 89	-0.304	0.741	-0.721	-0.624	-0.704	-0.040	0.081	0.990	0.990	0.981	-0.983	-0.056	0.952	0.869	-1.000(*)	-0.987	0.854	0.866	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations

Table S3. Pearson correlations between photosynthetic parameters for Purpuriu variety in the first year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	0.621	1																	
CCI75	0.678	0.997(*)	1																
CCI89	-0.546	-0.996	-0.986	1															
PAR65	0.645	1.000(*)	0.999(*)	-0.992	1														
PAR75	0.481	0.986	0.970	-0.997(*)	0.980	1													
PAR89	0.702	0.994	0.999(*)	-0.980	0.997(*)	0.962	1												
T _{leaf} 65	-0.008	0.779	0.729	-0.833	0.759	0.873	0.706	1											
T _{leaf} 75	0.997(*)	0.680	0.733	-0.610	0.702	0.547	0.755	0.069	1										
T _{leaf} 89	0.761	0.981	0.993	-0.959	0.986	0.934	0.996	0.642	0.809	1									
T _{ext} 65	0.297	-0.564	-0.500	0.637	-0.538	-0.694	-0.471	-0.957	0.223	-0.392	1								
T _{ext} 75	0.999(*)	0.583	0.642	-0.506	0.607	0.438	0.668	-0.056	0.992	0.729	0.343	1							
T _{ext} 89	0.271	0.923	0.891	-0.954	0.910	0.974	0.875	0.960	0.344	0.830	-0.839	0.224	1						
CO ₂ 65	0.140	-0.689	-0.633	0.753	-0.667	-0.801	-0.607	-0.991	0.063	-0.536	0.987	0.187	-0.915	1					
CO ₂ 75	0.999(*)	0.660	0.715	-0.588	0.683	0.525	0.738	0.043	1.000(*)	0.793	0.249	0.995	0.319	0.089	1				
CO ₂ 89	0.952	0.350	0.419	-0.263	0.379	0.188	0.450	-0.315	0.925	0.525	0.577	0.965	-0.038	0.437	0.935	1			
WUE 65	-0.678	-0.997(*)	-1.000(**)	0.986	-0.999(*)	-0.970	-0.999(*)	-0.729	-0.733	-0.993	0.500	-0.642	-0.891	0.633	-0.715	-0.419	1		
WUE 75	0.722	0.991	0.998(*)	-0.974	0.994	0.954	1.000(*)	0.686	0.773	0.998(*)	-0.446	0.688	0.862	-0.585	0.756	0.474	-0.998(*)	1	
WUE 89	0.881	0.918	0.945	-0.877	0.929	0.838	0.955	0.465	0.915	0.977	-0.189	0.858	0.693	-0.345	0.904	0.693	-0.945	0.963	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations

Table S4. Pearson correlations between photosynthetic parameters for Coarna neagra variety in the first year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	-0.882	1																	
CCI75	0.875	-1.000(*)	1																
CCI89	0.857	-0.999(*)	0.999(*)	1															
PAR65	0.763	-0.978	0.981	0.987	1														
PAR75	-0.064	0.526	-0.540	-0.569	-0.693	1													
PAR89	-0.345	0.746	-0.757	-0.779	-0.870	0.959	1												
T _{leaf} 65	0.661	-0.231	0.215	0.181	0.021	0.706	0.476	1											
T _{leaf} 75	-0.650	0.931	-0.937	-0.948	-0.987	0.800	0.938	0.141	1										
T _{leaf} 89	-0.945	0.988	-0.985	-0.979	-0.933	0.387	0.633	-0.379	0.863	1									
T _{ext} 65	-0.132	0.583	-0.596	-0.624	-0.741	0.998(*)	0.976	0.656	0.839	0.449	1								
T _{ext} 75	-0.929	0.994	-0.992	-0.987	-0.949	0.430	0.669	-0.336	0.885	0.999(*)	0.491	1							
T _{ext} 89	0.961	-0.978	0.975	0.966	0.913	-0.338	-0.592	0.427	-0.835	-0.999(*)	-0.402	-0.995	1						
CO ₂ 65	-0.768	0.979	-0.982	-0.988	-1.000(**)	0.688	0.866	-0.028	0.986	0.936	0.736	0.951	-0.916	1					
CO ₂ 75	0.087	0.392	-0.407	-0.438	-0.577	0.989	0.905	0.805	0.701	0.244	0.976	0.289	-0.193	0.571	1				
CO ₂ 89	-0.693	0.951	-0.956	-0.965	-0.995	0.763	0.915	0.082	0.998(*)	0.891	0.806	0.911	-0.866	0.994	0.657	1			
WUE 65	-0.982	0.955	-0.950	-0.939	-0.872	0.251	0.516	-0.508	0.782	0.990	0.317	0.982	-0.996	0.876	0.103	0.817	1		
WUE 75	-0.988	0.799	-0.789	-0.767	-0.654	-0.092	0.195	-0.770	0.523	0.882	-0.024	0.860	-0.906	0.660	-0.241	0.573	0.941	1	
WUE 89	-0.822	0.993	-0.995	-0.998(*)	-0.995	0.621	0.818	-0.117	0.967	0.963	0.673	0.975	-0.948	0.996	0.496	0.980	0.915	0.723	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations

Table S5. Pearson correlations between photosynthetic parameters for Gelu variety in the second year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	-0.987	1																	
CCI75	0.979	-0.999(*)	1																
CCI89	0.963	-0.994	0.998(*)	1															
PAR65	-0.604	0.468	-0.431	-0.368	1														
PAR75	0.999(*)	-0.980	0.971	0.953	-0.634	1													
PAR89	-0.995	0.998(*)	-0.994	-0.985	0.523	-0.991	1												
T _{leaf} 65	-0.418	0.267	-0.227	-0.160	0.977	-0.452	0.327	1											
T _{leaf} 75	-0.994	0.998(*)	-0.995	-0.986	0.516	-0.990	1.000(**)	0.319	1										
T _{leaf} 89	-0.954	0.990	-0.995	-0.999(*)	0.338	-0.942	0.979	0.127	0.981	1									
T _{ext} 65	-0.972	0.997(*)	-0.999(*)	-0.999(*)	0.400	-0.962	0.990	0.193	0.991	0.998(*)	1								
T _{ext} 75	-0.851	0.924	-0.939	-0.961	0.095	-0.830	0.898	-0.121	0.902	0.969	0.951	1							
T _{ext} 89	0.450	-0.588	0.621	0.673	0.440	0.416	-0.536	0.623	-0.543	-0.697	-0.648	-0.852	1						
CO ₂ 65	0.999(*)	-0.992	0.986	0.973	-0.575	0.997(*)	-0.998(*)	-0.385	-0.998(*)	-0.964	-0.980	-0.869	0.482	1					
CO ₂ 75	-1.000(**)	0.986	-0.979	-0.962	0.607	-0.999(*)	0.995	0.421	0.994	0.953	0.971	0.849	-0.447	-0.999(*)	1				
CO ₂ 89	-0.982	1.000(*)	-1.000(**)	-0.997	0.444	-0.974	0.996	0.240	0.997	0.993	0.999(*)	0.934	-0.610	-0.988	0.982	1			
WUE 65	-0.977	0.999(*)	-1.000(**)	-0.998(*)	0.421	-0.968	0.993	0.216	0.994	0.996	1.00(*)	0.943	-0.630	-0.984	0.976	1.00(*)	1		
WUE 75	0.456	-0.593	0.626	0.678	0.434	0.422	-0.541	0.618	-0.548	-0.701	-0.652	-0.855	1.00(**)	0.488	-0.453	-0.615	-0.634	1	
WUE 89	-0.654	0.524	-0.488	-0.427	0.998(*)	-0.682	0.577	0.961	0.569	0.397	0.458	0.159	0.381	-0.626	0.656	0.500	0.478	0.376	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations

Table S6. Pearson correlations between photosynthetic parameters for Moldova variety in the second year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	-0.967	1																	
CCI75	0.982	-0.998(*)	1																
CCI89	-0.956	0.999(*)	-0.994	1															
PAR65	-0.963	1.00(**)	-0.997	1.000(*)	1														
PAR75	0.100	-0.351	0.285	-0.387	-0.363	1													
PAR89	-0.727	0.879	-0.843	0.896	0.885	-0.756	1												
T _{leaf} 65	0.992	-0.992	.998(*)	-0.986	-0.990	0.228	-0.810	1											
T _{leaf} 75	-0.167	0.414	-0.349	0.449	0.426	-0.998(*)	0.798	-0.294	1										
T _{leaf} 89	-1.000(*)	0.972	-0.986	0.962	0.968	-0.120	0.741	-0.994	0.187	1									
T _{ext} 65	-0.822	0.648	-0.700	0.619	0.639	0.485	0.206	-0.741	-0.425	0.810	1								
T _{ext} 75	0.980	-0.998(*)	1.00(**)	-0.995	-0.998(*)	0.297	-0.850	0.997(*)	-0.361	-0.984	-0.691	1							
T _{ext} 89	0.134	-0.383	0.317	-0.418	-0.395	0.999(*)	-0.778	0.261	-0.999(*)	-0.154	0.455	0.330	1						
CO ₂ 65	0.998(*)	-0.982	0.993	-0.974	-0.980	0.169	-0.773	0.998(*)	-0.235	-0.999(*)	-0.780	0.991	0.202	1					
CO ₂ 75	0.094	-0.346	0.279	-0.382	-0.358	1.00(**)	-0.752	0.222	-0.997(*)	-0.114	0.490	0.292	0.999(*)	0.163	1				
CO ₂ 89	-0.978	0.999(*)	-1.000(*)	0.996	0.998(*)	-0.304	0.853	-0.997(*)	0.367	0.982	0.686	-1.000(**)	-0.336	-0.990	-0.298	1			
WUE 65	0.890	-0.743	0.788	-0.717	-0.735	-0.365	-0.334	0.823	0.301	-0.881	-0.991	0.780	-0.333	0.856	-0.371	-0.776	1		
WUE 75	-0.786	0.918	-0.888	0.933	0.923	-0.693	0.996	-0.860	0.741	0.799	0.294	-0.894	-0.717	-0.827	-0.689	0.897	-0.418	1	
WUE 89	-0.982	0.901	-0.930	0.884	0.896	0.088	0.585	-0.950	-0.021	0.978	0.914	-0.925	0.055	-0.967	0.095	0.922	-0.960	0.656	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations

Table S7. Pearson correlations between photosynthetic parameters for Purpurium variety in the second year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	0.993	1																	
CCI75	-0.984	-0.998(*)	1																
CCI89	0.989	1.000(*)	-0.999(*)	1															
PAR65	0.764	0.684	-0.636	0.661	1														
PAR75	0.097	-0.019	0.083	-0.049	0.717	1													
PAR89	0.780	0.702	-0.655	0.680	1.000(*)	0.699	1												
T _{leaf} 65	-0.252	-0.362	0.421	-0.390	0.432	0.939	0.410	1											
T _{leaf} 75	0.614	0.519	-0.463	0.493	0.979	0.845	0.973	0.609	1										
T _{leaf} 89	-0.320	-0.428	0.485	-0.455	0.367	0.912	0.344	0.997(*)	0.551	1									
T _{ext} 65	0.951	0.980	-0.991	0.986	0.526	-0.217	0.547	-0.540	0.339	-0.598	1								
T _{ext} 75	-0.907	-0.950	0.968	-0.959	-0.421	0.331	-0.444	0.636	-0.225	0.689	-0.993	1							
T _{ext} 89	-0.508	-0.605	0.655	-0.629	0.168	0.808	0.143	0.961	0.367	0.979	-0.751	0.823	1						
CO ₂ 65	0.625	0.530	-0.475	0.505	0.981	0.837	0.976	0.598	1.000(**)	0.539	0.352	-0.239	0.354	1					
CO ₂ 75	-0.036	-0.152	0.215	-0.181	0.618	0.991	0.598	0.976	0.766	0.958	-0.344	0.453	0.879	0.757	1				
CO ₂ 89	0.999(*)	0.986	-0.973	0.980	0.797	0.150	0.812	-0.200	0.655	-0.269	0.933	-0.884	-0.462	0.666	0.017	1			
WUE 65	-0.999(*)	-0.998(*)	0.991	-0.995	-0.732	-0.049	-0.749	0.298	-0.576	0.365	-0.964	0.926	0.549	-0.587	0.084	-0.995	1		
WUE 75	0.809	0.736	-0.691	0.715	0.997(*)	0.663	0.999(*)	0.364	0.961	0.297	0.587	-0.487	0.094	0.964	0.558	0.839	-0.780	1	
WUE 89	0.062	0.178	-0.240	0.207	-0.597	-0.987	-0.577	-0.982	-0.749	-0.965	0.369	-0.476	-0.891	-0.740	-1.000(*)	0.009	-0.110	-0.536	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations

Table S8. Pearson correlations between photosynthetic parameters for Coarna neagra variety in the second year.

	ANT	CCI65	CCI75	CCI89	PAR65	PAR75	PAR89	T _{leaf} 65	T _{leaf} 75	T _{leaf} 89	T _{ext} 65	T _{ext} 75	T _{ext} 89	CO ₂ 65	CO ₂ 75	CO ₂ 89	WUE 65	WUE 75	WUE 89
ANT	1																		
CCI65	-0.995	1																	
CCI75	0.100	0.000	1																
CCI89	0.100	0.000	1.000(**)	1															
PAR65	0.426	-0.333	0.943	0.943	1														
PAR75	0.977	-0.993	-0.116	-0.116	0.222	1													
PAR89	-0.886	0.836	-0.549	-0.549	-0.796	-0.766	1												
T _{leaf} 65	-0.937	0.967	0.254	0.254	-0.083	-0.990	0.669	1											
T _{leaf} 75	-0.913	0.949	0.316	0.316	-0.019	-0.979	0.620	0.998(*)	1										
T _{leaf} 89	-0.904	0.857	-0.516	-0.516	-0.772	-0.791	0.999(*)	0.698	0.650	1									
T _{ext} 65	-0.579	0.495	-0.869	-0.869	-0.984	-0.391	0.891	0.258	0.196	0.872	1								
T _{ext} 75	0.091	0.008	1.000(**)	1.000(**)	0.940	-0.124	-0.542	0.262	0.323	-0.509	-0.865	1							
T _{ext} 89	-0.056	0.156	0.988	0.988	0.879	-0.269	-0.412	0.401	0.459	-0.377	-0.781	0.989	1						
CO ₂ 65	-0.906	0.859	-0.512	-0.512	-0.769	-0.794	0.999(*)	0.701	0.654	1.000(**)	0.870	-0.505	-0.372	1					
CO ₂ 75	0.044	0.055	0.998(*)	0.998(*)	0.923	-0.171	-0.502	0.307	0.368	-0.468	-0.840	0.999(*)	0.995	-0.464	1				
CO ₂ 89	0.296	-0.200	0.980	0.980	0.990	0.085	-0.705	0.056	0.120	-0.677	-0.950	0.978	0.937	-0.673	0.967	1			
WUE 65	-0.615	0.533	-0.846	-0.846	-0.975	-0.431	0.910	0.301	0.239	0.893	0.999(*)	-0.842	-0.753	0.891	-0.815	-0.936	1		
WUE 75	-0.998(*)	0.987	-0.161	-0.161	-0.481	-0.962	0.913	0.914	0.886	0.929	0.629	-0.153	-0.006	0.930	-0.106	-0.355	0.662	1	
WUE 89	-0.857	0.904	0.427	0.427	0.101	-0.948	0.521	0.983	0.993	0.554	0.077	0.435	0.563	0.558	0.476	0.238	0.120	0.823	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In blue – positive correlations

In red – negative correlations