

Additional file 1 related to: Živković, S.P., Vasić, T.P., Petrović, M.Z., Jevremović, D. (2026).
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Supplementary Table S1. SIMPER Analysis Results

Comparison	Plant Species	Average	SD	Ratio	Mean (G1)	Mean (G2)	Cumulative	Permutation p-value
T1_T2	<i>Amaranthus hybridus</i> L.	0.067	0.016	4.233	5.095	0.000	0.119	0.003
T1_T2	<i>Galinsoga parviflora</i> Cav.	0.055	0.007	7.887	0.000	4.073	0.216	0.008
T1_T2	<i>Cirsium arvense</i> (L.) Scop.	0.038	0.003	13.632	2.854	0.000	0.283	0.016
T1_T2	<i>Setaria glauca</i> (L.) P. B.	0.037	0.030	1.246	3.316	1.291	0.349	0.150
T1_T2	<i>Chenopodium polyspermum</i> L.	0.037	0.031	1.207	0.000	2.721	0.415	0.104
T1_T2	<i>Hibiscus trionum</i> L.	0.035	0.026	1.322	2.782	0.000	0.477	0.089
T1_T2	<i>Agropyrum repens</i> Beauv.	0.029	0.004	7.790	0.000	2.157	0.528	0.008
T1_T2	<i>Amaranthus retroflexus</i> L.	0.028	0.017	1.691	5.733	3.527	0.578	0.218
T1_T2	<i>Capsella bursa-pastoris</i> (L.) Medic.	0.026	0.007	3.478	0.000	1.931	0.624	0.020
T1_T2	<i>Chenopodium album</i> L.	0.022	0.012	1.795	6.281	6.242	0.664	0.919
T1_T3	<i>Setaria glauca</i> (L.) P. B.	0.037	0.028	1.313	3.316	0.000	0.076	0.159
T1_T3	<i>Galinsoga parviflora</i> Cav.	0.037	0.005	7.425	0.000	3.091	0.152	0.153
T1_T3	<i>Geranium dissectum</i> Jusl.	0.034	0.008	4.461	2.854	0.000	0.223	0.029
T1_T3	<i>Chenopodium polyspermum</i> L.	0.033	0.010	3.438	0.000	2.786	0.291	0.188
T1_T3	<i>Setaria viridis</i> (L.) P. B.	0.033	0.011	3.018	2.816	0.000	0.358	0.162
T1_T3	<i>Portulaca oleracea</i> L.	0.029	0.009	3.393	0.000	2.448	0.419	0.011
T1_T3	<i>Agropyrum repens</i> Beauv.	0.025	0.006	3.881	0.000	2.099	0.470	0.035
T1_T3	<i>Chenopodium album</i> L.	0.025	0.017	1.454	6.281	4.653	0.521	0.836
T1_T3	<i>Polygonum convolvulus</i> L.	0.023	0.018	1.259	0.816	2.209	0.569	0.351
T1_T3	<i>Hibiscus trionum</i> L.	0.023	0.012	1.963	2.782	2.742	0.616	0.733
T1_T3	<i>Amaranthus hybridus</i> L.	0.021	0.017	1.230	5.095	3.391	0.660	0.926

Comparison	Plant Species	Average	SD	Ratio	Mean (G1)	Mean (G2)	Cumulative	Permutation p-value
T1_T4	<i>Chenopodium polyspermum</i> L.	0.041	0.005	7.619	0.000	3.399	0.084	0.051
T1_T4	<i>Galinsoga parviflora</i> Cav.	0.033	0.012	2.760	0.000	2.703	0.151	0.278
T1_T4	<i>Setaria glauca</i> (L.) P. B.	0.032	0.022	1.463	3.316	2.036	0.215	0.466
T1_T4	<i>Chenopodium album</i> L.	0.030	0.016	1.885	6.281	4.728	0.276	0.649
T1_T4	<i>Amaranthus hybridus</i> L.	0.029	0.017	1.691	5.095	2.616	0.335	0.584
T1_T4	<i>Hibiscus trionum</i> L.	0.028	0.018	1.583	2.782	1.276	0.392	0.359
T1_T4	<i>Setaria viridis</i> (L.) P. B.	0.027	0.014	1.902	2.816	0.471	0.448	0.362
T1_T4	<i>Amaranthus retroflexus</i> L.	0.027	0.011	2.586	5.733	3.399	0.503	0.229
T1_T4	<i>Agropyrum repens</i> Beauv.	0.025	0.013	1.865	0.000	2.065	0.554	0.038
T1_T4	<i>Polygonum persicaria</i> L.	0.021	0.016	1.303	1.799	0.471	0.596	0.557
T1_T4	<i>Ambrosia artemisiifolia</i> L.	0.020	0.010	2.115	1.054	1.961	0.638	0.206
T1_T4	<i>Polygonum convolvulus</i> L.	0.020	0.022	0.904	0.816	1.374	0.678	0.488
T1_T5	<i>Amaranthus hybridus</i> L.	0.056	0.025	2.285	5.095	1.323	0.101	0.010
T1_T5	<i>Chenopodium album</i> L.	0.055	0.023	2.341	6.281	2.645	0.198	0.021
T1_T5	<i>Geranium dissectum</i> Jusl.	0.044	0.011	3.901	2.854	0.000	0.277	0.007
T1_T5	<i>Setaria viridis</i> (L.) P. B.	0.041	0.013	3.132	2.816	0.000	0.351	0.027
T1_T5	<i>Setaria glauca</i> (L.) P. B.	0.037	0.013	2.948	3.316	2.733	0.418	0.158
T1_T5	<i>Amaranthus retroflexus</i> L.	0.037	0.021	1.784	5.733	3.582	0.484	0.031
T1_T5	<i>Agropyrum repens</i> Beauv.	0.035	0.005	7.597	0.000	2.294	0.546	0.001
T1_T5	<i>Hibiscus trionum</i> L.	0.032	0.025	1.308	2.782	1.997	0.604	0.158
T1_T5	<i>Chenopodium polyspermum</i> L.	0.031	0.018	1.688	0.000	2.096	0.659	0.305
T2_T3	<i>Amaranthus hybridus</i> L.	0.047	0.015	3.182	0.000	3.391	0.085	0.058

Comparison	Plant Species	Average	SD	Ratio	Mean (G1)	Mean (G2)	Cumulative	Permutation p-value
T2_T3	<i>Setaria viridis</i> (L.) P. B.	0.043	0.016	2.673	3.159	0.000	0.163	0.026
T2_T3	<i>Cirsium arvense</i> (L.) Scop.	0.038	0.012	3.195	0.000	2.786	0.233	0.016
T2_T3	<i>Hibiscus trionum</i> L.	0.037	0.005	8.140	0.000	2.742	0.300	0.047
T2_T3	<i>Polygonum lapathifolium</i> L.	0.036	0.004	8.421	0.000	2.681	0.367	0.013
T2_T3	<i>Senecio vulgaris</i> L.	0.034	0.008	4.201	0.000	2.466	0.428	0.029
T2_T3	<i>Portulaca oleracea</i> L.	0.034	0.009	3.542	0.000	2.448	0.489	0.009
T2_T3	<i>Geranium dissectum</i> Jusl.	0.033	0.006	5.128	2.402	0.000	0.549	0.040
T2_T3	<i>Polygonum convolvulus</i> L.	0.030	0.022	1.332	0.000	2.209	0.603	0.117
T2_T3	<i>Chenopodium album</i> L.	0.027	0.019	1.405	6.242	4.653	0.652	0.784
T2_T4	<i>Setaria viridis</i> (L.) P. B.	0.037	0.019	1.920	3.159	0.471	0.078	0.054
T2_T4	<i>Amaranthus hybridus</i> L.	0.036	0.005	6.667	0.000	2.616	0.153	0.335
T2_T4	<i>Chenopodium album</i> L.	0.032	0.021	1.513	6.242	4.728	0.220	0.553
T2_T4	<i>Ambrosia artemisiifolia</i> L.	0.027	0.011	2.557	0.000	1.961	0.277	0.032
T2_T4	<i>Setaria glauca</i> (L.) P. B.	0.027	0.023	1.166	1.291	2.036	0.334	0.728
T2_T4	<i>Polygonum persicaria</i> L.	0.026	0.013	1.989	2.377	0.471	0.389	0.180
T2_T4	<i>Sorghum halepence</i> L.	0.024	0.019	1.281	0.000	1.799	0.440	0.139
T2_T4	<i>Chenopodium polyspermum</i> L.	0.024	0.019	1.246	2.721	3.399	0.491	0.681
T2_T4	<i>Cirsium arvense</i> (L.) Scop.	0.023	0.018	1.303	0.000	1.688	0.539	0.438
T2_T4	<i>Convolvulus arvensis</i> L.	0.021	0.018	1.217	0.000	1.520	0.584	0.098
T2_T4	<i>Capsella bursa-pastoris</i> (L.) Medic.	0.021	0.011	1.895	1.931	0.882	0.628	0.079
T2_T4	<i>Polygonum convolvulus</i> L.	0.020	0.029	0.666	0.000	1.374	0.669	0.494
T2_T5	<i>Galinsoga parviflora</i> Cav.	0.074	0.008	9.034	4.073	0.000	0.120	0.001

Comparison	Plant Species	Average	SD	Ratio	Mean (G1)	Mean (G2)	Cumulative	Permutation p-value
T2_T5	<i>Chenopodium album</i> L.	0.066	0.028	2.324	6.242	2.645	0.227	0.005
T2_T5	<i>Cirsium arvense</i> (L.) Scop.	0.059	0.004	14.848	0.000	3.288	0.323	0.001
T2_T5	<i>Setaria viridis</i> (L.) P. B.	0.057	0.021	2.656	3.159	0.000	0.415	0.001
T2_T5	<i>Polygonum persicaria</i> L.	0.043	0.013	3.221	2.377	0.000	0.485	0.002
T2_T5	<i>Geranium dissectum</i> Jusl.	0.043	0.009	4.911	2.402	0.000	0.556	0.004
T2_T5	<i>Chenopodium polyspermum</i> L.	0.040	0.025	1.585	2.721	2.096	0.621	0.061
T2_T5	<i>Setaria glauca</i> (L.) P. B.	0.040	0.017	2.407	1.291	2.733	0.686	0.101
T3_T4	<i>Geranium dissectum</i> Jusl.	0.027	0.011	2.377	0.000	2.150	0.067	0.156
T3_T4	<i>Polygonum convolvulus</i> L.	0.026	0.020	1.263	2.209	1.374	0.132	0.219
T3_T4	<i>Setaria glauca</i> (L.) P. B.	0.025	0.020	1.212	0.000	2.036	0.194	0.844
T3_T4	<i>Ambrosia artemisiifolia</i> L.	0.024	0.009	2.562	0.000	1.961	0.254	0.084
T3_T4	<i>Polygonum lapathifolium</i> L.	0.023	0.014	1.621	2.681	0.943	0.313	0.185
T3_T4	<i>Chenopodium album</i> L.	0.023	0.018	1.260	4.653	4.728	0.371	0.909
T3_T4	<i>Portulaca oleracea</i> L.	0.023	0.014	1.610	2.448	0.745	0.427	0.093
T3_T4	<i>Polygonum persicaria</i> L.	0.022	0.014	1.487	1.936	0.471	0.482	0.469
T3_T4	<i>Hibiscus trionum</i> L.	0.020	0.014	1.420	2.742	1.276	0.531	0.880
T3_T4	<i>Senecio vulgaris</i> L.	0.019	0.012	1.584	2.466	1.387	0.579	0.653
T3_T4	<i>Convolvulus arvensis</i> L.	0.019	0.016	1.217	0.000	1.520	0.627	0.229
T3_T4	<i>Cirsium arvense</i> (L.) Scop.	0.018	0.015	1.227	2.786	1.688	0.673	0.826
T3_T5	<i>Galinsoga parviflora</i> Cav.	0.048	0.006	8.456	3.091	0.000	0.098	0.032
T3_T5	<i>Setaria glauca</i> (L.) P. B.	0.042	0.006	6.890	0.000	2.733	0.185	0.068
T3_T5	<i>Polygonum lapathifolium</i> L.	0.041	0.006	7.503	2.681	0.000	0.270	0.001

Comparison	Plant Species	Average	SD	Ratio	Mean (G1)	Mean (G2)	Cumulative	Permutation p-value
T3_T5	<i>Portulaca oleracea</i> L.	0.038	0.011	3.385	2.448	0.000	0.348	0.001
T3_T5	<i>Polygonum convolvulus</i> L.	0.034	0.026	1.324	2.209	0.000	0.418	0.035
T3_T5	<i>Amaranthus hybridus</i> L.	0.033	0.023	1.449	3.391	1.323	0.485	0.412
T3_T5	<i>Chenopodium album</i> L.	0.033	0.023	1.412	4.653	2.645	0.552	0.489
T3_T5	<i>Sorghum halepence</i> L.	0.030	0.008	3.902	1.931	0.000	0.613	0.040
T3_T5	<i>Polygonum persicaria</i> L.	0.030	0.022	1.319	1.936	0.000	0.674	0.081
T4_T5	<i>Galinsoga parviflora</i> Cav.	0.043	0.016	2.752	2.703	0.000	0.086	0.053
T4_T5	<i>Chenopodium album</i> L.	0.035	0.034	1.022	4.728	2.645	0.156	0.397
T4_T5	<i>Geranium dissectum</i> Jusl.	0.034	0.015	2.337	2.150	0.000	0.224	0.030
T4_T5	<i>Ambrosia artemisiifolia</i> L.	0.031	0.012	2.499	1.961	0.000	0.286	0.005
T4_T5	<i>Sorghum halepence</i> L.	0.028	0.022	1.274	1.799	0.000	0.342	0.062
T4_T5	<i>Chenopodium polyspermum</i> L.	0.026	0.016	1.642	3.399	2.096	0.395	0.539
T4_T5	<i>Cirsium arvense</i> (L.) Scop.	0.025	0.022	1.145	1.688	3.288	0.445	0.320
T4_T5	<i>Hibiscus trionum</i> L.	0.025	0.020	1.225	1.276	1.997	0.495	0.580
T4_T5	<i>Convolvulus arvensis</i> L.	0.024	0.020	1.207	1.520	0.000	0.543	0.053
T4_T5	<i>Senecio vulgaris</i> L.	0.024	0.020	1.233	1.387	1.799	0.592	0.232
T4_T5	<i>Setaria glauca</i> (L.) P. B.	0.023	0.018	1.302	2.036	2.733	0.638	0.889
T4_T5	<i>Amaranthus retroflexus</i> L.	0.023	0.014	1.622	3.399	3.582	0.685	0.516