Title: **Microbial Biostimulants Improve Early Seedling Resilience to Water Stress**

Table S1 – Results of three-way ANOVA with factors crop, biostimulant inoculation (Biost) and water stress (Water) on the different plant parameters. Significant effects ($p < 0.05$) are shown in bold (n=9 for biomass and n=3 for all other parameters).

Shoot:	Crop	Biost	Water	Crop x Biost	Crop x Water	Biost x Water	Crop x Biost x Water
Biomass	**<0.001**	**<0.001**	**<0.001**	0.322	**<0.001**	0.191	0.067
Isotopic signatures							
$\delta^{15}N$	**<0.001**	**0.015**	**0.002**	**0.002**	0.382	0.742	0.055
$\delta^{13}C$	**<0.001**	0.069	**<0.001**	0.755	**<0.001**	0.247	0.120
Macronutrients							
[N]	**<0.001**	0.591	**0.029**	0.379	0.310	0.204	0.188
[P]	**<0.001**	**<0.001**	**0.005**	**<0.001**	0.180	0.059	**<0.001**
[K]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**
[Mg]	**<0.001**	**<0.001**	**0.003**	**<0.001**	0.053	**<0.001**	**<0.001**
[Ca]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**
Micronutrients							
[B]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	0.164	**<0.001**	**<0.001**
[Cu]	**0.002**	0.093	0.135	**0.018**	**0.040**	0.450	0.120
[Fe]	**<0.001**	**<0.001**	**0.017**	**0.007**	**<0.001**	**<0.001**	**0.003**
[Mn]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**
[Zn]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	0.432	**<0.001**
Enzymatic activities							
APX	**<0.001**	**<0.001**	**<0.001**	0.480	0.410	**0.004**	**0.007**
CAT	**0.003**	**<0.001**	**<0.001**	**0.010**	**0.004**	**<0.001**	**0.010**

GPX	**0.006**	**<0.001**	**<0.001**	0.082	0.524	**<0.001**	0.742
SOD	0.310	**<0.001**	**<0.001**	0.795	0.123	**<0.001**	**0.012**

Table S2 – Results of two-way ANOVA with factors biostimulant inoculation (Biost) and water stress (Water) on the different plant parameters, for each crop. Significant effects ($p < 0.05$) are shown in bold (n=9 for biomass and n=3 for all other parameters).

	Maize			**Tomato**		
Shoot:	Biost	Water	Biost x Water	Biost	Water	Biost x Water
Biomass	**0.002**	0.102	0.780	**0.010**	**<0.001**	0.093
Isotopic signatures						
$\delta^{15}N$	**0.010**	**0.026**	0.314	**0.014**	**0.025**	0.071
$\delta^{13}C$	0.209	0.755	0.373	0.247	**<0.001**	0.150
Macronutrients						
[N]	0.237	**0.028**	0.320	0.937	0.403	0.158
[P]	**0.001**	0.207	**<0.001**	**<0.001**	**0.014**	**0.001**
[K]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**0.003**
[Mg]	**<0.001**	**0.018**	**<0.001**	0.930	**0.020**	**<0.001**
[Ca]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**
Micronutrients						
[B]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	0.073	**<0.001**
[Cu]	**0.057**	0.075	0.237	0.428	0.328	0.388
[Fe]	**0.004**	**0.005**	**0.004**	**<0.001**	**0.003**	**<0.001**
[Mn]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	0.499	0.804
[Zn]	**<0.001**	**<0.001**	**<0.001**	**<0.001**	0.102	0.119
Enzymatic activities						
APX	0.005	**<0.001**	**0.003**	**<0.001**	**<0.001**	0.944
CAT	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**
GPX	**<0.001**	**<0.001**	**0.020**	**<0.001**	**<0.001**	**0.038**
SOD	**<0.001**	**<0.001**	**0.004**	**<0.001**	**<0.001**	**<0.001**

Table S3 – Pearson's correlations between all analysed plant parameters. Significant correlations (2-tailed) are shown in bold. Green shading means that the correlation is positive: dark green when correlation is significant at the 0.01 level, and light green correlation is significant at the 0.05 level. Red and yellow shading means that the correlation is negative: red when correlation is significant at the 0.01 level, and yellow when correlation is significant at the 0.05 level (n = 36).

	biomass	$\delta^{15}N$	$\delta^{13}C$	[N]	[P]	[K]	[Mg]	[Ca]	[B]	[Cu]	[Fe]	[Mn]	[Zn]	SOD	APX	CAT	GPX
biomass	**1**	**-0.39**	**-0.81**	**0.63**	**0.92**	**0.42**	-0.27	**-0.33**	**0.74**	**0.37**	**0.53**	**0.78**	**0.71**	-0.28	**-0.40**	-0.21	-0.19
$\delta^{15}N$		**1**	**-0.48**	-0.25	**-0.50**	0.10	0.05	**0.43**	**-0.49**	**-0.42**	**-0.47**	**-0.52**	-0.29	-0.12	-0.18	**-0.39**	-0.18
$\delta^{13}C$			**1**	**0.79**	**0.84**	0.18	-0.31	**-0.55**	**0.96**	**0.46**	**0.64**	**0.98**	**0.82**	-0.00	**-0.33**	-0.13	-0.24
[N]				**1**	**0.69**	**0.37**	-0.24	-0.29	**0.70**	0.32	**0.44**	**0.75**	**0.72**	0.04	**-0.44**	-0.32	-0.29
[P]					**1**	**0.34**	-0.09	**-0.34**	**0.88**	**0.46**	**0.68**	**0.91**	**0.88**	0.01	-0.10	0.10	0.02
[K]						**1**	0.28	**0.64**	0.19	0.14	0.25	0.18	**0.46**	**-0.55**	**-0.49**	**-0.36**	-0.18
[Mg]							**1**	**0.63**	-0.16	**0.50**	**0.46**	-0.20	-0.20	-0.19	0.27	0.31	0.30
[Ca]								**1**	**-0.48**	-0.10	-0.15	**0.53**	-0.24	**-0.46**	-0.18	-0.16	-0.03
[B]									**1**	**0.52**	**0.73**	**0.98**	**0.84**	-0.08	-0.17	0.06	-0.07
[Cu]										**1**	**0.88**	**0.54**	**0.38**	0.02	0.12	0.15	0.09
[Fe]											**1**	**0.72**	**0.55**	-0.12	0.05	0.22	0.14
[Mn]												**1**	**0.85**	0.03	-0.19	0.00	-0.10
[Zn]													**1**	-0.10	-0.23	-0.70	-0.05
SOD														**1**	**0.37**	-0.04	-0.09
APX															**1**	**0.69**	**0.73**
CAT																**1**	**0.88**
GPX																	**1**

Table S4 – Component Matrix for the 4 components extracted using Principal Component Analysis (PCA) and the percentage of variation explained by each component.

Component:	1	2	3	4
Shoot biomass	0.841	-0.205	0.029	-0.198
Shoot $\delta^{15}N$	-0.523	-0.477	0.108	0.011
Shoot $\delta^{13}C$	-0.969	0.056	0.176	-0.004
Shoot [N]	0.800	-0.28	-0.082	0.074
Shoot [P]	0.914	0.119	0.050	-0.11
Shoot [K]	0.315	-0.522	0.691	-0.171
Shoot [Mg]	-0.164	0.322	0.830	0.372
Shoot [Ca]	-0.434	-0.344	0.793	0.007
Shoot [B]	0.957	0.105	-0.036	-0.064
Shoot [Cu]	0.569	0.373	0.406	0.509
Shoot [Fe]	0.743	0.352	0.429	0.286
Shoot [Mn]	0.982	0.087	-0.098	0.003
Shoot [Zn]	0.875	-0.084	0.071	-0.196
Shoot SOD activity	-0.057	0.287	-0.618	0.546
Shoot APX activity	-0.275	0.860	-0.045	0.004
Shoot CAT activity	-0.066	0.883	0.146	-0.358
Shoot GPX activity	-0.145	0.787	0.238	-0.448
Variation explained by each component:	43%	20%	16%	7%
Cumulative variation explained:		63%	79%	86%