

Supplementary Materials

Table S1. Results of univariate analysis of variance for the interaction effects of habitat type of Parent (H), endophyte (E) and water stress (W) on Biomass, ABA, CtK and IAA content of *A. inebrians*.

Treatment	Df	Biomass (g)		ABA content (ng/g)		CtK content (ng/g)		IAA content (ng/g)	
		F	P	F	P	F	P	F	P
Aboveground H	1	0.064	0.802	132.851	<0.001	5.954	0.018	1.687	0.2
E	1	22.110	<0.001	567.432	<0.001	209.415	<0.001	7.739	<0.001
W	3	454.909	<0.001	39.143	<0.001	75.563	<0.001	0.467	0.498
H*E	1	0.001	0.976	0.003	0.956	15.496	<0.001	0.062	0.98
H*W	3	9.623	<0.001	7.538	<0.001	2.447	0.124	0.088	0.768
E*W	3	1.086	0.369	84.451	<0.001	4.463	0.008	0.42	0.74
H*E*W	3	0.484	0.696	1.406	0.252	3.316	0.028	0.182	0.908
Underground H	1	81.536	<0.001	88.15	<0.001	39.948	<0.001	1.014	0.319
E	1	1.282	0.266	600.85	<0.001	604.52	<0.001	4.05	0.037
W	3	893.962	<0.001	4.256	0.01	149.522	<0.001	1.034	0.314
H*E	1	3.441	0.073	0.134	0.716	0.126	0.944	1.01	0.396
H*W	3	11.839	<0.001	5.014	0.004	5.221	0.027	1.021	0.317
E*W	3	1.241	0.311	45.951	<0.001	8.224	<0.001	1.001	0.401
H*E*W	3	1.903	0.149	0.402	0.752	5.664	0.002	1.01	0.397

Table S2. Results of univariate analysis of variance for the interaction effects of habitat type of Parent (H), endophyte (E) and water stress (W) on Chlorophyll content, Net photosynthetic rate, Stomatal conductance, Intercellular carbon dioxide concentration and Transpiration rate of *A. inebrians*.

Treatment	Df	Chlorophyll content (mg/dm ²)		Net photosynthetic rate (μmol CO ₂ m ⁻² s ⁻¹)		Stomatal conductance (mol H ₂ O m ⁻² s ⁻¹)		Intercellular carbon dioxide concentration (μmol CO ₂ mol ⁻¹)		Transpiration rate (mmol H ₂ O m ⁻² s ⁻¹)	
		F	P	F	P	F	P	F	P	F	P
E	1	72.464	<0.001	249.940	<0.001	8.256	0.006	8.434	0.006	4.240	0.045
W	3	34.043	<0.001	1381.604	<0.001	83.399	<0.001	74.167	<0.001	66.255	<0.001
H	1	17.217	<0.001	888.684	<0.001	57.077	<0.001	1.097	0.309	3.279	0.076
E*W	3	4.513	0.004	7.950	<0.001	3.540	0.021	0.277	0.841	1.298	0.286
E*H	1	6.298	0.013	2.595	0.114	1.276	0.264	1.042	0.312	0.001	0.978
W*H	3	2.859	0.038	94.580	<0.001	0.388	0.762	1.527	0.220	0.264	0.851
E*W*H	3	0.774	0.510	11.280	<0.001	2.128	0.109	1.295	0.287	0.207	0.891

Table S3. Results of univariate analysis of variance for the interaction effects of habitat type of Parent (H), endophyte (E) and water stress (W) on C, N and P content of *A. inebrians*.

Treatment	Df	C content (mg/g)		N content (mg/g)		P content (mg/g)	
		F	P	F	P	F	P
Aboveground							
H	1	2.977	0.093	30.291	<0.001	460.923	<0.001
E	1	14.501	0.001	88.805	<0.001	9.721	0.004
W	3	8.570	<0.001	52.120	<0.001	48.245	<0.001
H*E	1	3.383	0.075	13.463	0.001	0.446	0.509
H*W	3	0.364	0.780	6.199	0.002	0.540	0.658
E*W	3	1.157	0.341	6.322	0.002	1.923	0.146
H*E*W	3	1.916	0.147	1.168	0.337	0.246	0.863
Underground H	1	3.225	0.082	47.304	<0.001	4.165	0.050
E	1	2.126	0.155	98.166	<0.001	26.471	<0.001
W	3	4.161	0.013	21.275	<0.001	3.731	0.021
H*E	1	0.001	0.982	14.919	0.001	1.332	0.257
H*W	3	0.070	0.976	1.303	0.290	0.330	0.803
E*W	3	0.207	0.891	2.115	0.118	3.891	0.018
H*E*W	3	0.049	0.985	9.316	<0.001	0.582	0.631

Table S4. Results of univariate analysis of variance for the interaction effects of habitat type of Parent (H), endophyte (E) and water stress (W) on C:N, C:P and N:P of *A. inebrians*.

Treatment	Df	C:N		C:P		N:P	
		F	P	F	P	F	P
Aboveground H	1	1.836	0.157	254.417	<0.001	264.519	<0.001
E	1	27.158	<0.001	5.510	0.025	1.724	0.198
W	3	13.411	<0.001	37.569	<0.001	24.719	<0.001
H*E	1	21.696	<0.001	1.768	0.193	3.946	0.056
H*W	3	3.670	0.022	20.628	<0.001	18.028	<0.001
E*W	3	6.025	0.002	3.200	0.036	1.857	0.157
H*E*W	3	2.983	0.046	1.783	0.170	2.402	0.086
Underground H	1	8.959	0.005	8.766	0.006	45.657	<0.001
E	1	6.163	0.018	11.704	0.002	2.390	0.132
W	3	1.525	0.227	3.614	0.024	3.589	0.024
H*E	1	0.140	0.711	3.513	0.070	5.322	0.028
H*W	3	0.376	0.771	0.521	0.671	1.854	0.157
E*W	3	3.087	0.041	0.879	0.462	0.426	0.735
H*E*W	3	0.050	0.985	0.568	0.640	0.311	0.817