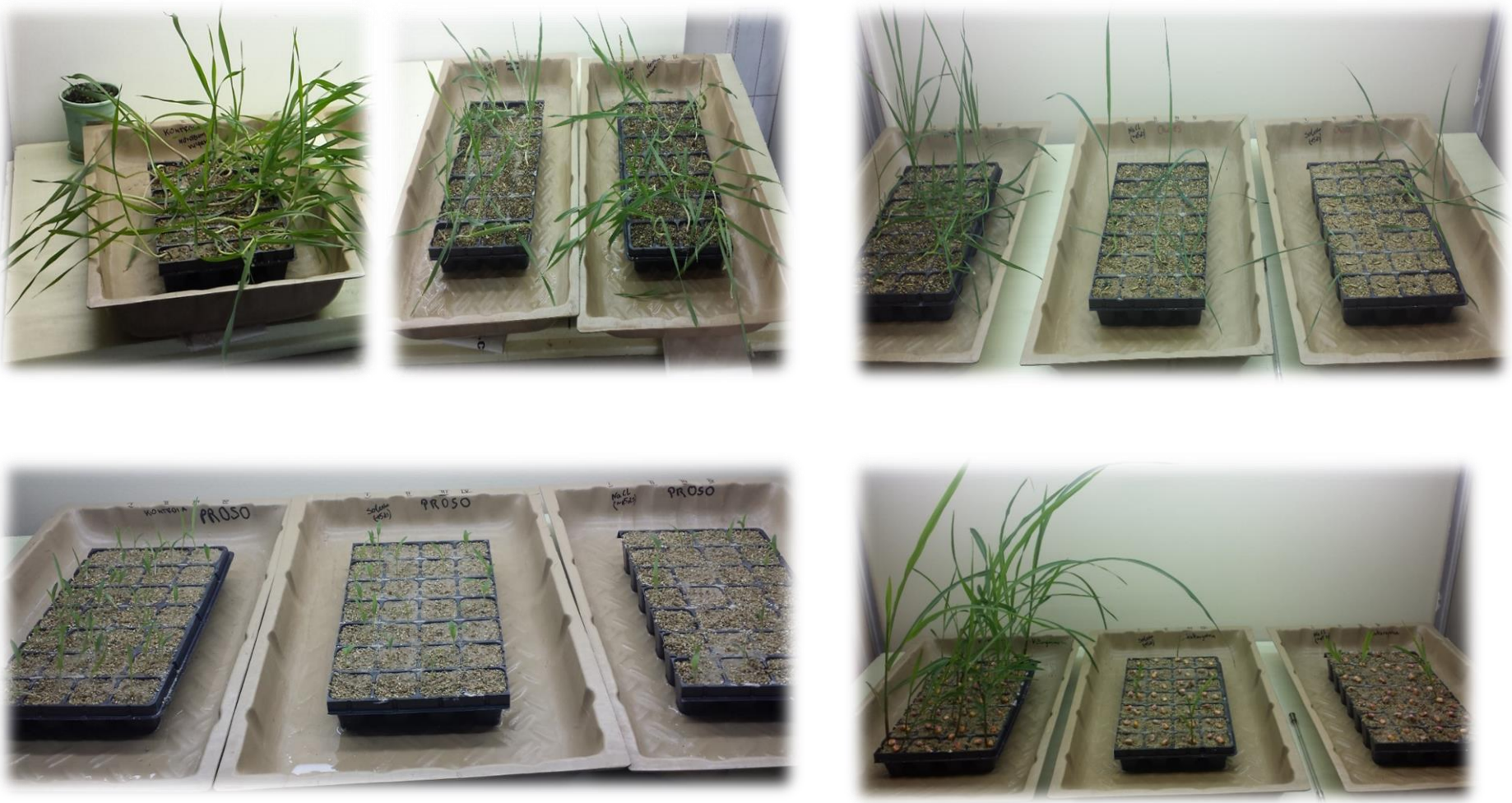

Figure S1. Plantlets of investigated model plants at end of pot experiment after 42 days of growth. Treatments: (a) control, (b) brine 15 dS·m^{-1}, (c) NaCl 15 dS·m^{-1} (150 mM)

Table S1. Ionic composition of salt spring no. 16 of the Health Resort Ciechocinek (source: National Institute of Public Health-National Institute of Hygene, 24 ul. Chocimska, 00-792 Warsaw Poland, June 2008)

Cations	$mg \cdot dm^{-3}$	mwale	mwal %	Anions	$mg \cdot dm^{-3}$	mwale	mwal %
NH_4^+	32	1.78	0.19	F^-	0.47	0.02	0
Na^+	18265	794.5	86.5	Cl^-	31905	900	98.28
K^+	170	4.35	0.47	Br^-	98	1.23	0.14
Ca^{2+}	1503	75	8.17	J^-	2.3	0.02	0
Mg^{2+}	486.1	40	4.35	HCO_3^-	337.9	5.54	0.6
Sr^{2+}	75	1.71	0.19	SO_4^{2-}	430.02	8.96	0.98
Li^+	6.22	0.9	0.1	NO_2^-	< 0.005	-	-
Fe^{2+}	5.85	0.21	0.02	NO_3^-	< 0.20	-	-
Mn^{2+}	0.15	0	0	PO_4^{2-}	< 0.01	-	-
Ba^{2+}	0.649	0.01	0	CN^-	< 0.01	-	-
Hg^{2+}	< 0.001	-	-	Total	32,773.69	915.77	100
Se^{2+}	< 0.01	-	-				
Co^{2+}	< 0.007	-	-				
As^{3+}	< 0.010	-	-				
Cd^{2+}	< 0.001	-	-				
Cr^{3+}	< 0.004	-	-				
Cu^{2+}	0.01	0	0				
Ni^{2+}	0.0312	0	0				
Pb^{2+}	< 0.010	-	-				
Sb^{2+}	< 0.009	-	-				
Zn^{2+}	1.88	0.06	-				
Al^{3+}	0.009	0	0.01				
Total	20,545.89	918.52	100				

Table S2. Results of discriminant analysis, forward selection and Monte Carlo permutation test. Conditional term effects are presented

Hordeum vulgare				*Avena sativa*				*Panicum miliaceum*				*Zea mays*			
Trait	**% variation explained**	**pseudo-F**	**P**	**Trait**	**% variation explained**	**pseudo-F**	**P**	**Trait**	**% variation explained**	**pseudo-F**	**P**	**Trait**	**% variation explained**	**pseudo-F**	**P**
TWC	28.6	11.2	0.002	TWC_r	27.8	6.2	0.004	PL	17.4	5.9	0.002	PL	26.5	5.1	0.008
W_f	22.2	12.2	0.002	RWR	18.1	5.0	0.022	SL	13.8	5.4	0.006	SLA	14.6	3.2	0.026
TWC_s	8.9	5.7	0.01	NoL	10.2	3.2	0.062	W_d	4.8	1.9	0.172	TWC_s	4.6	1.0	0.384
LWR	3.4	2.3	0.106	SLA	3.0	0.9	0.4	RWR	5.3	2.3	0.13	W_f	2.8	0.6	0.576
RWR	2.4	1.6	0.202	W_d	2.8	0.9	0.422	LWR	6.7	3.1	0.062	TWC	3.3	0.7	0.484
TWC_r	2.0	1.4	0.222	W_f	20.3	12.6	0.002	NoL	4.6	2.2	0.148	W_d	5.7	1.2	0.312
RL	1.8	1.3	0.31	RL	1.9	1.2	0.332	RL	2.2	1.1	0.376	NoL	6.0	1.3	0.258
SLA	1.3	0.9	0.382	LWR	1.9	1.2	0.32	TWC_s	1.0	0.5	0.62	TWC_r	1.5	0.3	0.666
W_d	1.2	0.9	0.424	SL	0.2	0.1	0.888	SLA	1.9	0.9	0.406	RL	1.8	0.3	0.63
PL	0.1	0.1	0.926	PL	0.2	0.1	unknown	W_f	1.3	0.6	0.562	SL	1.8	0.3	unknown
SL	0.1	0.1	unknown	TWC	0.2	< 0.1	0.918	TWC	1.2	0.5	0.634	RWR	1.7	0.3	0.714
NoL	< 0.1	< 0.1	0.978	TWC_s	0.6	0.3	0.766	TWC_r	0.6	0.3	0.744	LWR	0.3	< 0.1	0.952

TWC = tissue water content, Wf = fresh biomass, TWCs = tissue water content in shoots, LWR = leaves weight ratio, RWR = root weight ratio, TWCr = tissue water content in roots, RL = root length, SLA = specific leaf area, Wd = dry biomass, PL = total plant length, SL = shoot length, NoL = number of leaves