

Table S1. Plant materials assessed for salinity tolerance.

Clone/variety	Species	Accession number
BLB1C	<i>Solanum bulbocastanum</i>	PI275190
CMM1T	<i>Solanum commersonii</i>	PI243503
CMM6-6	<i>Solanum commersonii</i>	PI590886
CHM1B	<i>Solanum chomatophilum</i>	PI 310991
MLT1A	<i>Solanum multidissectum</i>	8MLT-M1
PNT04	<i>Solanum pinnactisectum</i>	PI347766
DM	<i>Solanum phureja</i>	DM1-3-516-R44
85/16	<i>Solanum phureja</i>	P1.22
Désirée	<i>Solanum tuberosum</i>	-
Tasso	<i>Solanum tuberosum</i>	-

Table S2: Salinity tolerance index (STI) derived from 12 parameters measured on nine clones grown at three NaCl concentrations (40, 60, 120 mM). Leaf number (LN), Root number (RN), Shoots fresh weight (SFW), Shoots dry weight (SDW), Roots fresh weight (RFW), Roots dry weight (RDW), day of shoot (DS), Day of root (DR), Total fresh weight (TFW), Total dry weight (TDW), Shoot height (SH), Root length (RL).

CLONES	LN	RN	SFW	SDW	RFW	RDW	DS	DR	TFW	TDW	SH	RL	Mean +/-	St. Dev.
BLB1C_40	0.84	0.88	0.62	0.89	0.61	0.63	0.99	0.99	0.62	0.78	0.50	0.56	0.74 +/-	0.17
BLB1C_60	1.20	0.63	0.94	1.09	0.66	0.67	1.00	0.93	0.81	0.91	0.58	0.57	0.83 +/-	0.21
BLB1C_120	0.00	0.15	0.22	0.33	0.01	0.05	0.63	0.38	0.13	0.21	0.12	0.11	0.19 +/-	0.18
CHM1B_40	0.50	0.42	0.59	0.67	0.50	0.53	1.03	0.98	0.56	0.63	0.74	1.12	0.69 +/-	0.23
CHM1B_60	0.26	1.52	0.56	0.69	0.45	0.45	0.95	0.88	0.52	0.62	0.43	1.05	0.70 +/-	0.35
CHM1B_120	0.04	0.00	0.03	0.05	0.00	0.00	0.34	0.00	0.02	0.03	0.03	0.00	0.05 +/-	0.10
CMM1T_40	1.01	0.75	1.40	1.10	0.95	0.74	0.98	0.93	1.24	0.99	0.96	1.05	1.01 +/-	0.18
CMM1T_60	0.99	0.73	1.32	1.05	0.82	0.82	0.98	0.95	1.15	0.98	0.93	0.80	0.96 +/-	0.16
CMM1T_120	0.15	0.14	0.34	0.29	0.02	0.09	0.82	0.43	0.23	0.23	0.22	0.05	0.25 +/-	0.21
CMM6-6_40	0.83	0.63	0.80	0.67	0.70	0.64	1.00	1.01	0.76	0.66	0.73	1.18	0.80 +/-	0.17
CMM6-6_60	0.67	0.53	1.07	0.92	0.92	1.00	0.99	1.00	1.01	0.95	0.62	1.25	0.91 +/-	0.21
CMM6-6_120	0.32	0.16	0.51	0.54	0.33	0.54	0.91	0.60	0.44	0.54	0.35	0.36	0.47 +/-	0.19
DESIREE_40	1.05	0.61	0.67	0.68	0.61	0.57	1.00	0.91	0.65	0.65	0.92	1.19	0.79 +/-	0.21
DESIREE_60	1.02	0.79	1.01	0.97	0.75	0.76	0.99	0.98	0.95	0.91	0.95	1.29	0.95 +/-	0.14
DESIREE_120	0.18	0.00	0.22	0.29	0.00	0.00	0.97	0.31	0.17	0.21	0.10	0.00	0.20 +/-	0.27
S.P.DM_40	0.68	0.66	0.44	0.50	0.19	0.27	1.00	0.48	0.39	0.45	0.45	0.32	0.49 +/-	0.21
S.P.DM_60	0.50	0.24	0.62	0.72	0.70	0.57	1.00	0.62	0.64	0.69	0.27	0.52	0.59 +/-	0.20
S.P.DM_120	0.16	0.00	0.30	0.32	0.00	0.00	0.98	1.44	0.25	0.25	0.07	0.00	0.31 +/-	0.45
MLT1A_40	1.00	1.02	0.88	0.76	0.96	0.90	1.00	0.99	0.90	0.78	0.83	1.01	0.92 +/-	0.09
MLT1A_60	1.06	1.32	1.26	1.14	1.04	1.18	1.00	0.99	1.21	1.15	0.74	0.93	1.08 +/-	0.16
MLT1A_120	0.41	0.45	0.53	0.58	0.14	0.42	0.96	0.52	0.44	0.55	0.16	0.34	0.46 +/-	0.21
S.P.85/16_40	0.67	0.71	0.52	0.58	0.35	0.35	1.00	0.97	0.48	0.51	0.84	0.87	0.65 +/-	0.23
S.P.85/16_60	0.44	0.53	0.29	0.35	0.30	0.39	0.99	0.72	0.29	0.36	0.35	0.74	0.48 +/-	0.22
S.P.85/16_120	0.22	0.00	0.06	0.09	0.00	0.00	0.84	0.00	0.04	0.06	0.10	0.00	0.12 +/-	0.24
TASSO_40	0.88	0.68	0.65	0.68	0.49	0.51	0.99	0.97	0.56	0.60	0.88	1.09	0.75 +/-	0.21
TASSO_60	0.68	0.58	0.55	0.65	0.34	0.38	1.00	0.89	0.44	0.52	0.49	1.11	0.64 +/-	0.24
TASSO_120	0.11	0.00	0.13	0.20	0.02	0.02	0.89	0.08	0.07	0.11	0.10	0.07	0.15 +/-	0.24

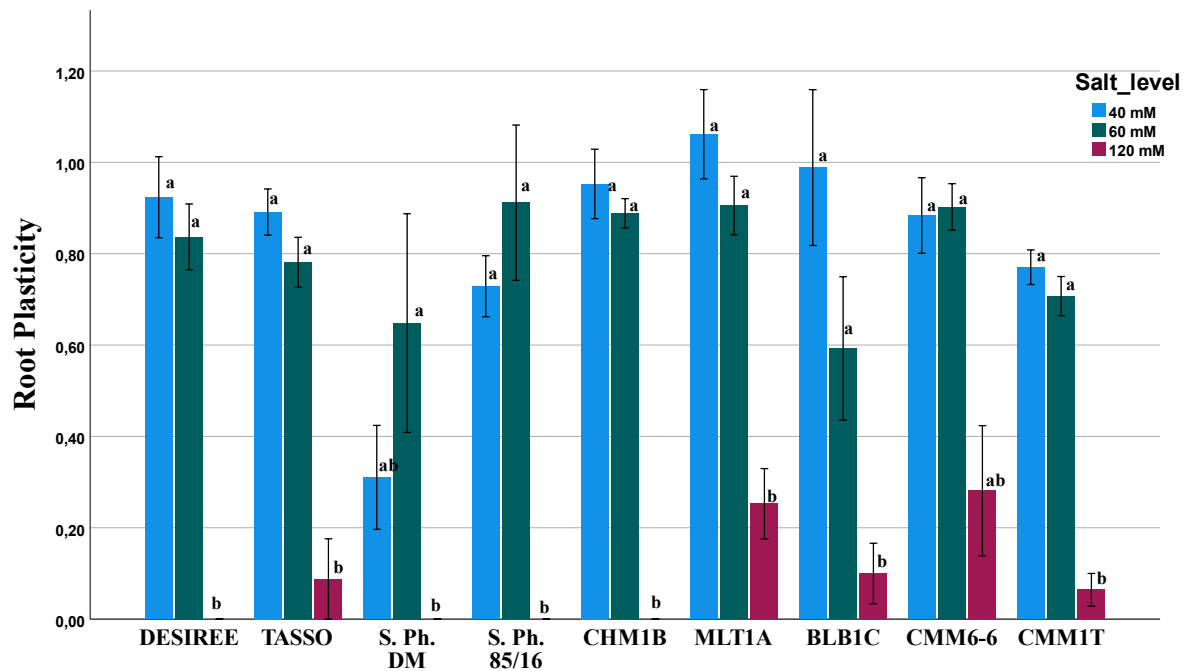


Figure S1: Root Plasticity of nine clones for each salt concentration, calculated as the ratio between the trait performance at 40, 60, 120 mM over the trait performance at 0 mM NaCl. Outliers are identified by different shapes and colors (blue dot = 40 mM; green dot = 60 mM; purple asterisk = 120 mM). Means denoted by the same letter did not significantly differ at $p < 0.05$ according to the Duncan's multiple range test.

Table S3: The linear regression model was constructed between Root Plasticity data and the EI values of all nine clones at each salinity level tested.

Summary of the model				
Model	R	R ²	R ² adapted	Std. err.
1	0.866 ^a	0.750	0.740	1.84999

a. Predictors: (constant), Plasticity

ANOVA ^a						
Model		sum of squares	df	average square	F	Sign.
1	regression	256.689	1	256.689	75.001	<.001 ^b
	residual	85.562	25	3.422		
	total	342.250	26			

a. dependent variable: Evaluation Index

b. Predictors: (constant), Plasticity

Coefficients ^a						
Model		Coefficients not standardised		Standardised coefficients		
		B	Std. err.	Beta	t	Sign.
1	(Constant)	2.349	.663		3.544	.002
	Plasticity	8.316	.960	.866	8.660	<.001

a. dependent variable: Evaluation Index

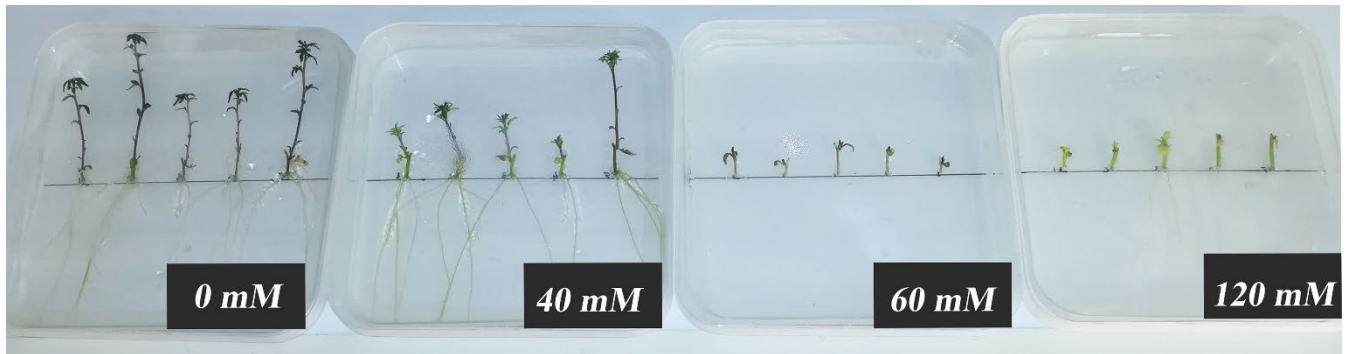


Figure S2: Plants after 30 days of growth laid out in plastic squared Petri dishes 12x12cm with 50 ml of MS medium containing 0, 40, 60, and 120 mM of NaCl.