

Evaluation of salinity tolerance indices in North African barley accessions at reproductive stage

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Table S1. Summary of descriptive statistics salt tolerance trait index of 28 agronomic and morphological characters in 31 barley genotypes grown at 100 mM (STTI 100) and 200 mM NaCl (STTI 200)

Variable	STTI 100				STTI 200			
	min	max	mean	SD	min	max	mean	SD
HEA	87	138	114.21	10.83	89	138	118	11.35
MAT	123	178	153.07	10.98	124	177	156	11.47
WDW	46.74	144.94	90.15	21.16	38.20	108.88	65.52	18.58
ShDW	49.53	132.20	91.60	20.98	38.20	126.56	69.54	20.55
RDW	38.78	142.08	71.24	21.07	26.64	92.61	57.54	15.23
PH	79.05	118.05	95.31	8.04	73.52	102.00	88.15	7.28
TN	62.79	164.29	103.94	25.56	36.96	96.77	76.14	15.50
LN	59.77	153.96	101.43	21.99	41.69	103.96	71.71	14.19
GY	50.47	166.42	94.00	28.60	21.34	106.11	63.11	21.03
SDW	44.71	172.97	95.20	27.84	31.66	112.21	66.96	20.49
1SDW	59.80	145.15	93.48	17.92	50.28	193.27	87.11	26.47
SN	56.76	159.09	104.24	25.04	40.48	136.84	78.93	20.50
GN/P	56.73	178.26	97.83	25.71	23.70	108.26	71.97	18.68
StN	45.69	131.10	96.83	20.38	35.54	184.64	97.38	32.64
GN/S	45.69	131.10	96.83	20.38	35.54	184.64	97.38	32.64
AL	81.37	109.70	93.23	6.92	84.37	111.69	96.01	7.58
RL	73.15	130.83	99.44	13.88	68.10	144.52	93.55	14.96
SL	81.11	113.28	95.10	7.15	84.38	114.17	96.28	7.80
TKW	74.39	116.36	90.50	9.63	52.24	98.60	83.09	11.36
Sh/R	65.05	211.11	137.38	43.42	46.67	190.38	124.00	35.14
R/Sh	48.28	151.92	80.91	28.61	53.35	213.92	89.05	33.87
LN/TN	73.52	132.34	99.63	15.21	59.49	144.91	95.28	19.76
SN/TN	73.55	135.84	101.09	13.47	85.20	150.00	104.05	15.49
S/Sh	60.61	164.76	105.46	21.56	68.29	128.95	98.65	18.44
GY/Sh	41.00	142.88	105.71	24.09	46.32	138.61	92.56	22.62
GY/W	44.61	141.00	104.10	17.69	46.91	145.26	95.04	20.33
GY/Sh+R	48.95	164.37	111.36	23.92	48.17	160.45	97.18	26.37
HI	45.46	128.02	100.90	15.46	49.63	133.95	92.90	16.24

AL – awn length; GN/P – grain No./plant; GN/S – grain No./spike; GY – grain yield/plant; GY/Sh – grain yield shoot dry weight ratio; GY/Sh+R – grain yield shoot and root dry weight ratio; GY/W – grain yield whole plant dry weight ratio; HEA – No. of days to heading; HI – harvest index; LN – leaf number/plant; LN/TN – leaf tiller No. ratio; MAT – No. of days to maturity; Max. – maximum; Min. – minimum; PH – plant height; RDW – root dry weight/plant; RL – rachis length; S/Sh – spike shoot dry weight Ratio; 1SDW – spike dry weight; SDW – spike dry weight/plant; ShDW – shoot dry weight/plant; SL – spike length; SN – spike No./plant; SD – standard deviation; StN – spikelet No./spike; STTI – salt tolerance trait index; TKW – 1000-Kernel weight; TN – tiller No./plant; Sh/R – shoot root dry weight ratio; R/Sh – root shoot dry weight ratio; SN/TN – spike tiller No. ratio; WDW – whole dry weight/plant

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Table S2. Pearson correlations between the agro-morphological traits under control conditions (above the diagonal) and under saline conditions (below the diagonal)

	WDW	ShDW	RDW	PH	TN	LN	GY	SDW	ISDW	SN	GN/P	GN/R	GN/S	AL	RL	SL	TKW	Sh/R	R/Sh	LN/TN	SN/TN	S/Sh	GY/Sh	GY/W	GY/Sh+R	HI
WDW	0.837***	0.525***	0.377***	0.454***	0.485***	0.703***	0.821***	0.585***	0.371***	0.577***	0.123*	0.122*	0.176**	0.424***	0.280***	0.201***	0.311***	-0.301***	-0.307***	-0.152**	-0.307***	-0.384***	-0.234***	-0.326***	-0.260***	
ShDW	0.874***	0.473***	0.406***	0.438***	0.504***	0.516***	0.617***	0.415***	0.296***	0.358***	0.008ns	0.007ns	0.323***	0.436***	0.403***	0.288***	0.396***	-0.362***	-0.225***	-0.556***	-0.538***	-0.344***	-0.473***	-0.418***		
RDW	0.513***	0.502***	0.242***	0.169**	0.292***	0.340***	0.328***	0.415***	-0.013ns	0.300***	0.213***	0.213***	0.301***	0.393***	0.409***	0.336***	-0.231***	0.251***	0.173**	-0.248***	-0.408***	-0.400***	-0.321***	-0.490***	-0.263***	
PH	0.488***	0.482***	0.289***	0.123*	0.253**	0.255***	0.234***	0.250***	0.001ns	0.093ns	0.077ns	0.077ns	0.340***	0.357***	0.386***	0.341***	0.257***	-0.247***	0.188**	-0.211***	-0.327***	-0.275***	-0.123*	-0.253***	-0.118*	
TN	0.601***	0.583***	0.377***	0.228***	0.734***	0.490***	0.460***	-0.127*	0.754***	0.414***	-0.237***	-0.235***	-0.151**	-0.041ns	-0.100ns	-0.011ns	0.259***	-0.239***	-0.339***	-0.416***	-0.022ns	0.040ns	0.164**	0.098ns	0.142*	
LN	0.655***	0.659***	0.439***	0.353***	0.833***	0.500***	0.424***	0.092ns	0.431***	0.422***	-0.007ns	-0.007ns	0.121*	0.195***	0.177***	0.090ns	0.216***	-0.185**	0.357***	-0.486***	-0.269***	-0.113ns	0.086ns	-0.066ns	0.085ns	
GY	0.687***	0.566***	0.382***	0.349***	0.445***	0.465***	0.811***	0.504***	0.414***	0.656***	0.184**	0.185**	-0.022ns	0.264***	0.053ns	0.126*	0.254***	-0.198***	0.010ns	-0.139*	0.040ns	0.083ns	0.365***	0.150**	0.321***	
SDW	0.860***	0.720***	0.374***	0.412***	0.576***	0.574***	0.763***	0.593***	0.529***	0.535***	-0.071ns	-0.072ns	-0.001ns	0.318***	0.095ns	0.093ns	0.281***	-0.285***	-0.045ns	0.068ns	0.092ns	-0.110ns	0.039ns	-0.040ns	-0.035ns	
ISDW	0.447***	0.333***	0.168**	0.279***	-0.122*	-0.018ns	0.481***	0.540***	-0.245***	0.350***	0.426***	0.425***	0.247***	0.521***	0.340***	0.252***	0.027ns	-0.036ns	0.311***	-0.133*	-0.131*	-0.261***	-0.121*	-0.235***	-0.135*	
SN	0.576***	0.528***	0.293***	0.203***	0.803***	0.702***	0.431***	0.628***	-0.250***	0.306***	-0.517***	-0.516***	-0.273***	-0.135*	-0.243***	-0.176**	0.294***	-0.315***	-0.406***	0.255***	0.219***	0.110ns	0.154**	0.185**	0.085ns	
GN/P	0.547***	0.428***	0.393***	0.238***	0.387***	0.412***	0.655***	0.550***	0.295***	0.365***	0.563***	0.563***	-0.228***	0.107ns	-0.125*	-0.106ns	0.159**	-0.111ns	-0.028ns	-0.171**	-0.029ns	0.096ns	0.262***	0.135*	0.256***	
GN/R	-0.121*	-0.152**	0.007ns	-0.038ns	-0.407***	-0.300***	0.094ns	-0.160***	0.401***	-0.560***	0.463***	0.956***	0.017ns	0.153**	0.064ns	0.061ns	-0.062ns	0.113ns	0.342***	-0.369***	-0.201***	0.013ns	0.154**	0.012ns	0.203***	
GN/S	-0.126*	-0.156**	0.002ns	-0.043ns	-0.409***	-0.302***	0.089ns	-0.164***	0.397***	-0.561***	0.456***	0.999***	0.016ns	0.152**	0.064ns	0.061ns	-0.063ns	0.115*	0.340***	-0.370***	-0.200***	0.014ns	0.156**	0.014ns	0.205***	
AL	0.209***	0.211***	0.173**	0.267***	-0.071ns	0.081ns	0.180**	0.139*	0.377***	-0.170**	0.032ns	0.179**	0.177**	0.582***	0.851***	0.510***	0.004ns	-0.015ns	0.379***	-0.186***	-0.519***	-0.526***	-0.381***	-0.505***	-0.356***	
RL	0.352***	0.302***	0.159**	0.283***	0.041ns	0.157**	0.259***	0.333***	0.473***	-0.024ns	0.182**	0.172**	0.170**	0.502***	0.741***	0.491***	0.072ns	-0.073ns	0.325***	-0.133*	-0.404***	-0.427***	-0.246***	-0.437***	-0.222***	
SL	0.326***	0.329***	0.187***	0.291***	0.009ns	0.164**	0.217***	0.233***	0.433***	-0.097ns	0.057ns	0.126*	0.126*	0.819***	0.675***	0.546***	-0.007ns	-0.005ns	0.390***	-0.217***	-0.566***	-0.593***	-0.390***	-0.600***	-0.373***	
TKW	-0.007ns	0.006ns	-0.070ns	0.171**	-0.241***	-0.066ns	0.111ns	0.005ns	0.280***	-0.221***	-0.121*	0.124*	0.123*	0.346***	0.148**	0.309***	-0.010ns	0.072ns	0.119*	-0.248***	-0.349***	-0.311***	-0.156**	-0.325***	-0.125*	
Sh/R	0.203***	0.250***	-0.341***	0.254***	0.067***	0.055ns	0.152**	0.190***	0.088ns	0.124*	-0.009ns	-0.105ns	-0.107ns	0.028ns	0.194***	0.139*	0.040ns	-0.910***	-0.039ns	0.001ns	-0.181**	-0.244***	-0.039ns	-0.089ns	-0.150**	
R/Sh	-0.212***	-0.239***	0.378***	-0.238***	-0.056ns	-0.016ns	-0.188**	-0.208***	-0.134*	-0.103ns	-0.019ns	0.077ns	0.079ns	-0.035ns	-0.194***	-0.127*	-0.037ns	-0.934***	0.040ns	-0.041ns	0.154**	0.267***	0.068ns	0.080ns	0.190***	
LN/TN	0.216***	0.252***	0.225***	0.260***	-0.097ns	0.435***	0.124*	0.109ns	0.175**	-0.025ns	0.123*	0.136*	0.138*	0.264***	0.215***	0.294***	0.272***	-0.058ns	0.124*	-0.072ns	-0.341***	-0.228***	-0.120*	-0.229***	-0.096ns	
SN/TN	-0.144**	-0.182**	-0.202***	-0.100ns	-0.495***	-0.352***	-0.091ns	-0.029ns	-0.114ns	0.089ns	-0.101ns	-0.091ns	-0.088ns	-0.097ns	-0.085ns	-0.122*	0.109ns	0.074ns	0.151**	0.360***	0.131*	-0.024ns	0.139*	-0.099ns		
S/Sh	-0.175**	-0.441***	-0.281***	-0.192***	-0.055ns	-0.187**	0.054ns	0.161**	0.153**	0.030ns	-0.017ns	-0.064ns	-0.065ns	-0.140*	-0.074ns	-0.169**	0.029ns	-0.044ns	0.010ns	-0.271***	0.149**	0.725***	0.556***	0.710***	0.517***	
GY/Sh	-0.262***	-0.414***	-0.270***	-0.152**	-0.140*	-0.251***	0.219***	-0.058ns	0.033ns	-0.109ns	0.113ns	0.184**	0.182**	-0.094ns	-0.227***	-0.223***	0.159**	-0.017ns	-0.044ns	-0.230***	0.080ns	0.545***	0.743***	0.914***	0.751***	
GY/W	-0.219***	-0.297***	-0.242***	-0.028ns	-0.116*	-0.201***	0.340***	-0.006ns	0.106ns	-0.096ns	0.181**	0.216***	0.214***	-0.050ns	-0.149**	-0.162**	0.239***	0.086ns	-0.132*	-0.195***	0.048ns	0.365***	0.813***	0.770***	0.905***	
GY/h+R	-0.239***	-0.385***	-0.372***	-0.134*	-0.135*	-0.248***	0.254***	-0.010ns	0.091ns	-0.113ns	0.103ns	0.170**	0.169**	-0.094ns	-0.173**	-0.201***	0.167***	0.116*	-0.178**	-0.253***	0.071ns	0.567***	0.924***	0.848***	0.732***	
HI	-0.217***	-0.365***	-0.229***	-0.063ns	-0.109ns	-0.183**	0.301***	0.001ns	0.073ns	-0.089ns	0.171**	0.214***	0.214***	-0.095ns	-0.173**	-0.184**	0.238***	0.011ns	-0.050ns	-0.157**	0.062ns	0.463***	0.830***	0.860***	0.837***	

Significance levels: * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$; ns no significant

AL – awn length; GN/P – grain No./plant; GN/S – grain No./spike; GY – grain yield/plant; GY/Sh – grain yield shoot and root dry weight ratio; GY/W – grain yield whole plant dry weight ratio; HI – harvest index; LN – leaf number/plant; LN/TN – leaf tiller No. ratio; PH – plant height; RDW – root dry weight/plant; RL – rachis length; S/Sh – spike shoot dry weight ratio; 1SDW – spike dry weight; SDW – spike dry weight/plant; ShDW – shoot dry weight/plant; SL – spike length; SN – spike No./plant; SN – spikelet No./spike; TKW – 1000-kernel weight; TN – tiller No./plant; Sh/R – shoot root dry weight ratio; R/Sh – root shoot dry weight ratio; SN/TN – spike tiller No. ratio; WDW – whole dry weight/plant

Table S3. Pearson correlation between agro-morphological characters and phenological traits including number of days to heading (HEA) and number of days to maturity (MAT) for barley under control and high salinity level (200 mM NaCl)

	Control		200 mM NaCl	
	HEA	MAT	HEA	MAT
WDW	0.443***	0.511***	0.441***	0.462***
ShDW	0.496***	0.526***	0.462***	0.468***
RDW	0.505***	0.526***	0.344***	0.371***
PH	0.362***	0.392***	0.262***	0.267***
TN	0.086*	0.131**	0.285***	0.305***
LN	0.383***	0.435***	0.272***	0.293***
GY	0.205***	0.303***	0.243***	0.285***
SDW	0.197***	0.284***	0.282***	0.309***
1SDW	0.374***	0.438***	0.165**	0.188**
SN	-0.123**	-0.083*	0.182**	0.192**
GN/P	0.194***	0.292***	0.274***	0.319***
StN	0.249***	0.297***	0.052 ^{ns}	0.078 ^{ns}
GN/S	0.249***	0.297***	0.052 ^{ns}	0.078 ^{ns}
AL	0.561***	0.542***	0.184**	0.189**
RL	0.526***	0.563***	0.246***	0.269***
SL	0.633***	0.624***	0.293***	0.293***
TKW	0.306***	0.321***	-0.187**	-0.178**
Sh/R	0.150**	0.155**	0.111 ^{ns}	0.084 ^{ns}
R/Sh	-0.184**	-0.183**	-0.122**	-0.094 ^{ns}
LN/TN	0.417***	0.431***	0.049 ^{ns}	0.054 ^{ns}
SN/TN	-0.328***	-0.338***	-0.219***	-0.241***
S/Sh	-0.611***	-0.571***	-0.267***	-0.256***
GY/Sh	-0.590***	-0.535***	-0.311***	-0.280***
GY/W	-0.386***	-0.312***	-0.278***	-0.250***
GY/Sh+R	-0.603***	-0.540***	-0.327***	-0.304***
HI	-0.349***	-0.280***	-0.309***	-0.279***
Days to flowering		0.985***		0.992***

Significance levels: * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$; ^{ns}no significant

AL – awn length; GN/P – grain No./plant; GN/S – grain No./spike; GY – grain yield/plant; GY/Sh – grain yield shoot dry weight ratio; GY/Sh+R – grain yield shoot and root dry weight ratio; GY/W – grain yield whole plant dry weight ratio; HEA – No. of days to heading; HI – harvest index; LN – leaf number/plant; LN/TN – leaf tiller No. ratio; MAT – No. of days to maturity; PH – plant height; RDW – root dry weight/plant; RL – rachis length; S/Sh – spike shoot dry weight ratio; 1SDW – spike dry weight; SDW – spike dry weight/plant; ShDW – shoot dry weight/plant; SL – spike length; SN – spike No./plant; StN – spikelet No./spike; TKW – 1000-kernel weight; TN – tiller No./plant; Sh/R – shoot root dry weight ratio; R/Sh – root shoot dry weight ratio; SN/TN – spike tiller No. ratio; WDW – whole dry weight/plant

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Table S4. Salinity tolerance and sensitivity indices for grain yield in barley genotypes grown under different salt levels (0, 100 and 200 mM NaCl)

	GY			STI		SSI		TOL		MP		GMP		HARM		STTI	
	Control	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200
Kebilli 2	6.72 ^a	5.46 ^{a-c}	3.70 ^{a-c}	1.72 ^a	1.16 ^{ab}	1.83 ^f	1.12 ^{f-i}	1.26 ^{de}	3.02 ^{b-e}	6.09 ^a	5.21 ^{ab}	6.06 ^a	4.99 ^{ab}	0.21 ^{e-i}	0.58 ^{d-j}	81.29 ^{g-j}	55.05 ^{f-l}
Tozeur 2	6.43 ^{ab}	4.18 ^{e-k}	4.19 ^a	1.26 ^{d-f}	1.26 ^a	2.95 ^c	0.84 ^{kl}	2.25 ^{a-c}	2.24 ^{e-i}	5.31 ^{cd}	5.31 ^a	5.19 ^{c-f}	5.19 ^a	0.42 ^{b-e}	0.42 ^{h-m}	65.05 ^{i-l}	65.11 ^{e-i}
Rihane	4.45 ^{e-i}	4.96 ^{c-f}	1.77 ^{j-l}	1.03 ^{g-j}	0.37 ^{kl}	-0.83 ^{ij}	1.45 ^{cd}	-0.51 ^{h-j}	2.68 ^{b-f}	4.71 ^{ef}	3.11 ^m	4.70 ^{f-i}	2.81 ^{l-n}	-0.11 ^{j-m}	0.86 ^{b-d}	111.38 ^{c-e}	39.72 ^{lm}
Manel	4.50 ^{e-i}	4.40 ^{d-j}	2.66 ^{d-i}	0.93 ^{i-k}	0.56 ^{f-k}	0.34 ^h	1.06 ^{hi}	0.10 ^{f-i}	1.84 ^{f-j}	4.45 ^{f-h}	3.58 ^{i-k}	4.45 ^{h-j}	3.46 ^{h-k}	0.02 ^{h-l}	0.51 ^{f-l}	97.70 ^{d-g}	59.11 ^{e-k}
Jerba	4.80 ^{d-h}	4.66 ^{c-h}	3.08 ^{c-g}	1.05 ^{f-j}	0.69 ^{e-h}	0.62 ^h	1.01 ^{ij}	0.14 ^{f-h}	1.72 ^{g-j}	4.73 ^{ef}	3.94 ^{f-i}	4.73 ^{f-i}	3.84 ^{e-i}	0.03 ^{h-l}	0.44 ^{h-l}	97.18 ^{e-g}	64.23 ^{e-j}
Sidi Bouzid	3.24 ^{i-k}	3.88 ^{g-l}	2.76 ^{d-i}	0.59 ^{mn}	0.42 ^{i-l}	-1.70 ^{kl}	0.34 ⁿ	-0.64 ^{h-j}	0.48 ^{l-o}	3.56 ^{ij}	3.00 ^m	3.54 ^l	2.99 ^{j-l}	-0.18 ^{k-m}	0.16 ^{m-p}	119.73 ^{b-d}	85.16 ^{b-d}
Kairouan	6.51 ^{ab}	4.66 ^{c-h}	3.30 ^{b-f}	1.42 ^{cd}	1.01 ^{bc}	2.70 ^{c-e}	1.25 ^{ef}	1.85 ^{b-d}	3.22 ^{b-d}	5.59 ^{bc}	4.91 ^{bc}	5.51 ^{b-d}	4.63 ^{bc}	0.33 ^{c-f}	0.66 ^{c-h}	71.53 ^{i-l}	50.59 ^{h-l}
Gabès	4.82 ^{d-h}	5.20 ^{b-d}	2.64 ^{e-i}	1.17 ^{e-h}	0.60 ^{f-j}	-0.97 ^{ij}	1.13 ^{f-i}	-0.38 ^{h-j}	2.18 ^{f-i}	5.01 ^{de}	3.73 ^{h-j}	5.00 ^{d-g}	3.57 ^{g-j}	-0.08 ^{j-m}	0.58 ^{d-j}	107.85 ^{c-f}	54.84 ^{f-l}
Tozeur 1	5.14 ^{c-g}	5.02 ^{c-e}	2.66 ^{d-i}	1.21 ^{e-g}	0.64 ^{f-h}	0.34 ^h	1.13 ^{f-i}	0.12 ^{f-h}	2.48 ^{d-g}	5.08 ^{de}	3.90 ^{g-i}	5.08 ^{d-g}	3.70 ^{g-i}	0.02 ^{l-l}	0.64 ^{d-i}	97.63 ^{d-g}	51.71 ^{g-l}
Tombari	2.72 ^{j-k}	2.09 ^{no}	1.23 ^{lm}	0.27 ^{op}	0.16 ^m	2.29 ^{d-f}	1.23 ^{e-g}	0.64 ^{e-g}	1.49 ^{i-k}	2.40 ^l	1.98 ^o	2.38 ^o	1.83 ^p	0.26 ^{c-h}	0.75 ^{b-f}	76.60 ^{g-j}	45.20 ^{j-m}
Kerkna	5.25 ^{b-g}	3.97 ^{f-k}	3.75 ^{a-c}	0.98 ^{h-k}	0.92 ^{cd}	2.37 ^{d-f}	0.68 ^l	1.28 ^{de}	1.50 ^{i-k}	4.61 ^{e-g}	4.50 ^{de}	4.56 ^{g-j}	4.44 ^{cd}	0.28 ^{c-g}	0.33 ^{j-o}	75.54 ^{g-j}	71.42 ^{d-f}
Sidi Mehdi	5.31 ^{b-f}	2.68 ^{mn}	2.78 ^{d-i}	0.67 ^{lm}	0.69 ^{e-h}	4.29 ^a	1.37 ^{de}	2.63 ^{ab}	2.53 ^{c-g}	4.00 ^{hi}	4.04 ^{f-h}	3.77 ^{kl}	3.84 ^{f-i}	0.66 ^a	0.63 ^{c-h}	50.47 ^l	52.29 ^{f-l}
Ras El Mouch	5.57 ^{a-e}	4.18 ^{e-k}	3.50 ^{a-e}	1.09 ^{f-i}	0.91 ^{cd}	2.75 ^{c-e}	1.08 ^{g-i}	1.39 ^{c-e}	2.07 ^{f-i}	4.87 ^{d-f}	4.54 ^{c-e}	4.82 ^{f-i}	4.42 ^{cd}	0.29 ^{c-f}	0.46 ^{g-l}	75.02 ^{g-j}	62.90 ^{e-j}
Ksar Megarine	3.86 ^{h-j}	2.97 ^{lm}	2.73 ^{d-i}	0.54 ^{mn}	0.49 ^{h-k}	2.28 ^{d-f}	0.74 ^{kl}	0.88 ^{ef}	1.13 ^{j-l}	3.42 ^j	3.29 ^{k-m}	3.39 ^{lm}	3.25 ^{i-k}	0.26 ^{c-g}	0.34 ^{j-n}	77.13 ^{g-j}	70.83 ^{d-g}
Saïda	3.28 ^{i-k}	3.56 ^{i-m}	3.48 ^{a-e}	0.55 ^{mn}	0.54 ^{g-k}	-0.48 ⁱ	-0.25 ^p	-0.27 ^{g-j}	-0.20 ^o	3.42 ^j	3.38 ^{j-m}	3.42 ^l	3.38 ^{i-k}	-0.08 ^{j-m}	-0.06 ^p	108.31 ^{c-f}	106.11 ^a
Azrir	2.48 ^{kl}	3.36 ^{k-m}	2.31 ^{g-k}	0.39 ^{no}	0.27 ^{lm}	-3.28 ^m	0.21 ⁿ	-0.88 ^{kl}	0.17 ^{m-o}	2.92 ^k	2.40 ⁿ	2.89 ^{mn}	2.40 ^{m-o}	-0.30 ^{mn}	0.07 ^{op}	135.39 ^b	93.16 ^{a-c}
Rihane 03	4.84 ^{d-h}	3.55 ^{i-m}	1.79 ^{j-l}	0.80 ^{kl}	0.41 ^{j-l}	2.80 ^{c-e}	1.62 ^b	1.30 ^{de}	3.05 ^{b-e}	4.19 ^{gh}	3.32 ^{k-m}	4.14 ^k	2.95 ^{k-m}	0.31 ^{c-f}	0.92 ^{bc}	73.22 ^{h-k}	36.99 ^{j-n}
Tichedrette	4.01 ^{g-i}	4.85 ^{c-g}	3.97 ^{ab}	0.91 ^{i-k}	0.74 ^{d-g}	-2.16 ^l	-0.08 ^o	-0.85 ^{i-k}	0.04 ^{no}	4.43 ^{f-h}	3.99 ^{f-h}	4.41 ^{h-j}	3.99 ^{d-h}	-0.19 ^{k-m}	0.01 ^p	121.09 ^{bc}	99.00 ^{ab}
Nailia	5.87 ^{a-d}	3.76 ^{h-l}	2.51 ^{f-j}	1.03 ^{g-j}	0.69 ^{e-h}	2.83 ^{cd}	1.56 ^{bc}	2.11 ^{b-d}	3.36 ^{bc}	4.82 ^{ef}	4.19 ^{e-g}	4.70 ^{f-j}	3.84 ^{f-i}	0.44 ^{a-d}	0.80 ^{b-e}	64.08 ^{i-l}	42.74 ^{j-m}
Temassine	6.38 ^{a-c}	5.53 ^{a-c}	2.93 ^{c-h}	1.65 ^{ab}	0.88 ^{c-e}	1.21 ^g	1.27 ^{ef}	0.85 ^{ef}	3.45 ^b	5.96 ^{ab}	4.66 ^{cd}	5.94 ^{ab}	4.33 ^{c-f}	0.14 ^{f-j}	0.74 ^{c-g}	86.66 ^{f-i}	45.97 ^{i-m}
Early 1	1.47 ^l	1.64 ^o	1.52 ^{k-m}	0.11 ^p	0.10 ^m	-1.28 ^{jk}	-0.01 ^o	-0.16 ^{g-j}	-0.04 ^{no}	1.55 ^m	1.50 ^p	1.55 ^p	1.49 ^p	-0.10 ^{j-m}	-0.03 ^p	111.03 ^{c-e}	102.98 ^{ab}
Early 2	3.29 ^{i-k}	1.94 ^{no}	1.72 ^{j-l}	0.30 ^{op}	0.27 ^{lm}	3.68 ^b	1.22 ^{e-h}	1.35 ^{c-e}	1.57 ^{h-k}	2.62 ^{kl}	2.51 ⁿ	2.53 ^{no}	2.38 ^{n-o}	0.52 ^{a-c}	0.62 ^{d-i}	58.94 ^{j-l}	52.40 ^{f-l}
Giza 123	5.42 ^{b-e}	4.15 ^{e-k}	3.02 ^{c-g}	1.05 ^{f-j}	0.77 ^{d-f}	2.25 ^{ef}	1.07 ^{g-i}	1.27 ^{de}	2.41 ^{d-h}	4.79 ^{ef}	4.22 ^{e-g}	4.75 ^{f-i}	4.04 ^{c-g}	0.27 ^{d-i}	0.57 ^{e-k}	76.58 ^{g-j}	55.63 ^{f-l}
Giza 125	3.58 ^{h-k}	5.96 ^{ab}	3.32 ^{b-f}	1.00 ^{g-k}	0.56 ^{f-k}	-6.93 ^o	0.32 ⁿ	-2.38 ^l	0.26 ^{m-o}	4.77 ^{ef}	3.45 ^{j-l}	4.62 ^{g-j}	3.45 ^{h-k}	-0.50 ⁿ	0.08 ^{n-p}	166.42 ^a	92.63 ^{a-c}
Giza 126	5.13 ^{c-g}	6.20 ^a	3.54 ^{a-d}	1.49 ^{bc}	0.85 ^{c-e}	-1.91 ^l	0.68 ^l	-1.07 ^{kl}	1.59 ^{h-k}	5.66 ^{a-c}	4.33 ^{d-f}	5.64 ^{a-c}	4.26 ^{c-f}	-0.19 ^{lm}	0.37 ^{i-m}	120.78 ^{bc}	68.92 ^{d-h}
Giza 127	5.43 ^{b-e}	5.24 ^{b-d}	3.54 ^{a-d}	1.33 ^{c-e}	0.90 ^{cd}	0.58 ^h	0.86 ^{jk}	0.19 ^{f-h}	1.89 ^{f-j}	5.33 ^{cd}	4.48 ^{de}	5.33 ^{c-e}	4.38 ^{c-e}	0.04 ^{h-l}	0.42 ^{h-l}	96.49 ^{e-g}	65.24 ^{e-i}
Giza 129	3.80 ^{h-j}	3.58 ^{i-m}	2.93 ^{c-h}	0.64 ^{lm}	0.52 ^{h-k}	0.68 ^h	0.51 ^m	0.21 ^{f-h}	0.86 ^{k-m}	3.69 ^{ij}	3.37 ^{j-l}	3.69 ^{kl}	3.34 ^{i-k}	0.06 ^{g-k}	0.26 ^{l-o}	94.37 ^{e-h}	77.28 ^{c-e}
Giza 130	2.72 ^{j-k}	4.42 ^{d-i}	2.08 ^{h-k}	0.56 ^{mn}	0.26 ^{lm}	-5.70 ⁿ	0.69 ^j	-1.70 ^{kl}	0.65 ^{l-n}	3.57 ^{ij}	2.40 ⁿ	3.47 ^l	2.38 ^{n-o}	-0.48 ⁿ	0.27 ^{k-o}	162.33 ^a	76.27 ^{c-e}
Giza 131	5.64 ^{a-e}	4.27 ^{d-k}	3.39 ^{a-e}	1.13 ^{e-i}	0.89 ^{c-e}	2.54 ^{c-e}	0.87 ^{jk}	1.37 ^{c-e}	2.25 ^{e-i}	4.95 ^{de}	4.51 ^{de}	4.91 ^{e-h}	4.37 ^{c-e}	0.28 ^{c-g}	0.50 ^{g-l}	75.74 ^{g-j}	60.12 ^{e-k}
Giza 2000	6.47 ^{ab}	3.42 ^{j-m}	2.04 ^{i-l}	1.04 ^{g-j}	0.62 ^{f-i}	4.38 ^a	1.66 ^b	3.06 ^a	4.43 ^a	4.95 ^{de}	4.26 ^{d-g}	4.70 ^{f-i}	3.64 ^{g-i}	0.62 ^{ab}	1.04 ^b	52.79 ^{j-l}	31.59 ^{mn}
El Arich	4.12 ^{f-i}	4.35 ^{d-k}	0.88 ^m	0.84 ^{j-l}	0.17 ^m	-0.5 ^l	1.95 ^a	-0.23 ^{g-j}	3.24 ^{b-d}	4.23 ^{gh}	2.50 ⁿ	4.23 ^{ij}	1.90 ^{o-p}	-0.05 ^{j-m}	1.30 ^a	105.62 ^{c-f}	21.34 ⁿ

Letters indicate significant differences at $P < 0.05$ according to Fisher's test

GMP – geometric mean productivity; GY – grain yield/plant; HARM – harmonic means; MP – mean productivity; SSI – stress susceptibility index; STI – salt tolerance index; STTI – salt tolerance trait index; TOL – tolerance index

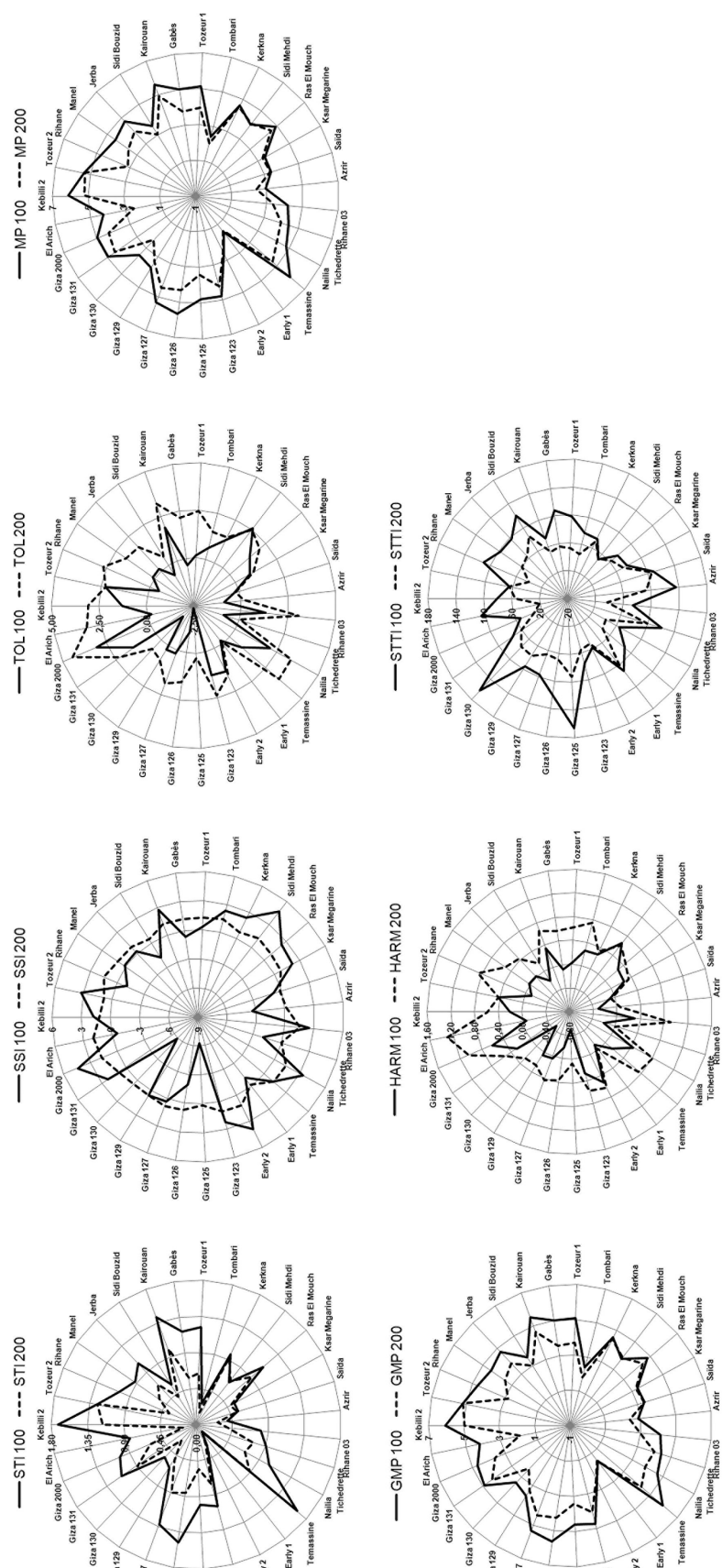


Figure S1. Schematic representation comparing grain yield-derived salt tolerance/sensitivity indices under two saline levels (100 and 200 mM NaCl). STI – salt tolerance index; SSI – stress susceptibility index; TOL – tolerance index; MP – mean productivity; GMP – geometric mean productivity; HARM – harmonic means; STTI – salt tolerance trait index