

Supplementary files

Supplementary Table 1a. Classification matrix for discriminant analysis (DA) of NaCl stress levels and morpho-physiological parameters in the mungbean varieties under salinity

Monitoring groups	Correct assignations %	Groups assigned by DA			
		C0	C1	C2	C3
<i>Standard DA mode</i>					
C0	100	6	0	0	0
C1	100	0	6	0	0
C2	83.3333	0	1	5	0
C3	83.3333	0	0	1	5
Total	91.6667	6	7	6	5
<i>Forward DA mode</i>					
C0	100.0000	6	0	0	0
C1	83.3333	0	5	1	0
C2	50.0000	0	2	3	1
C3	100.0000	0	0	0	6
Total	83.3333	6	7	4	7

Supplementary Table 1b. Classification matrix for discriminant analysis (DA) of NaCl stress levels and photosynthetic parameters in the mungbean varieties under salinity

	Correct assignations %	Groups assigned by DA			
		C0	C1	C2	C3
<i>Standard DA mode</i>					
C0	83.33334	5	1	0	0
C1	33.33333	0	2	2	2
C2	66.66666	0	1	4	1
C3	66.66666	0	1	1	4
Total	62.50000	5	5	7	7
<i>Forward DA mode</i>					
C0	66.66666	4	2	0	0
C1	50.00000	1	3	2	0
C2	16.66667	0	2	1	3
C3	66.66666	0	1	1	4
Total	50.00000	5	8	4	7

Supplementary Table 1c: Classification matrix for discriminant analysis (DA) of NaCl stress levels and nodulation parameters in the mungbean varieties under salinity

Monitoring groups	Correct assignments %	Groups assigned by DA			
		C0	C1	C2	C3
<i>Standard DA mode</i>					
C0	100.0000	6	0	0	0
C1	16.6667	2	1	2	1
C2	16.6667	1	2	1	2
C3	66.6667	0	0	2	4
Total	50.0000	9	3	5	7
<i>Forward DA mode</i>					
C0	83.33334	5	1	0	0
C1	50.00000	1	3	2	0
C2	33.33333	1	1	2	2
C3	66.66666	0	1	1	4
Total	58.33333	7	6	5	6

Supplementary Table 1d. Classification matrix for discriminant analysis (DA) of NaCl stress levels and yeild parameters in the mungbean varieties under salinity

Monitoring groups	Correct assignations %	Groups assigned by DA			
		C0	C1	C2	C3
<i>Standard DA mode</i>					
C0	100.0000	2	0	0	0
C1	100.0000	0	2	0	0
C2	100.0000	0	0	2	0
C3	50.0000	0	0	1	1
Total	87.5000	2	2	3	1
<i>Forward DA mode</i>					
C0	100.0000	2	0	0	0
C1	100.0000	0	2	0	0
C2	50.0000	0	0	1	1
C3	50.0000	0	0	1	1
Total	75.0000	2	2	2	2

Supplementary Table 2a. Classification matrix for discriminant analysis (DA) of NaCl stress exposure duration and morpho-physiological parameters in the mungbean varieties under salinity

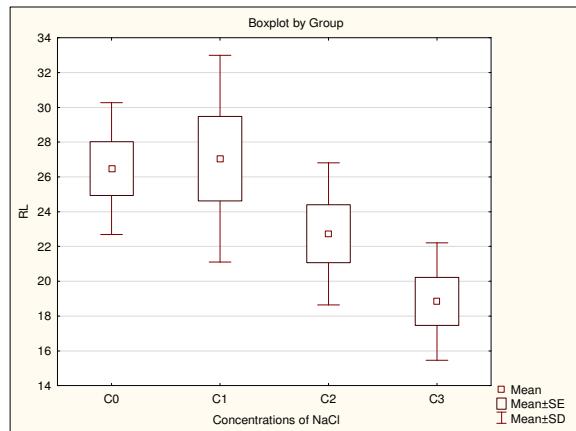
Monitoring groups	Correct assignations %	Groups assigned by DA		
		E1	E2	E3
<i>Standard DA mode</i>				
E1	100.0000	8	0	0
E2	100.0000	0	8	0
E3	100.0000	0	0	8
Total	100.0000	8	8	8
<i>Forward DA mode</i>				
E1	100.0000	8	0	0
E2	100.0000	0	8	0
E3	87.5000	0	1	7
Total	95.8333	8	9	7
<i>Backward DA mode</i>				
E1	100.0000	8	0	0
E2	75.0000	1	6	1
E3	87.5000	0	1	7
Total	87.5000	9	7	8

Supplementary Table 2b. Classification matrix for discriminant analysis (DA) of NaCl stress exposure duration and photosynthetic parameters in the mungbean varieties under salinity

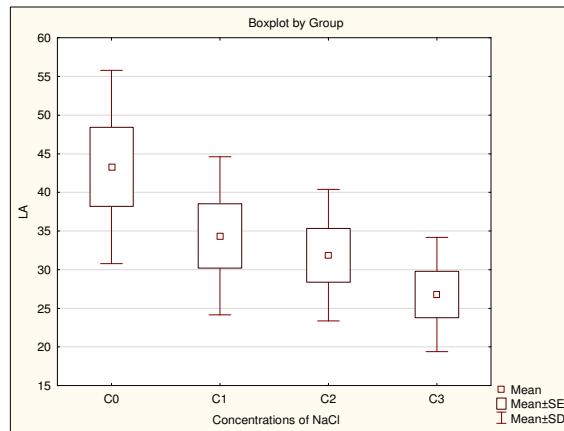
Monitoring groups	Correct assignations %	Groups assigned by DA		
		E1	E2	E3
<i>Standard DA mode</i>				
E1	87.5000	7	1	0
E2	75.0000	1	6	1
E3	100.0000	0	0	8
Total	87.5000	8	7	9
<i>Forward DA mode</i>				
E1	87.5000	7	1	0
E2	75.0000	1	6	1
E3	100.0000	0	0	8
Total	87.5000	8	7	9
<i>Backward DA mode</i>				
E1	62.5000	5	3	0
E2	75.0000	1	6	1
E3	100.0000	0	0	8
Total	79.1667	6	9	9

Supplementary Table 2c. Classification matrix for discriminant analysis (DA) of NaCl stress exposure duration and nodulation parameters in the mungbean varieties under salinity

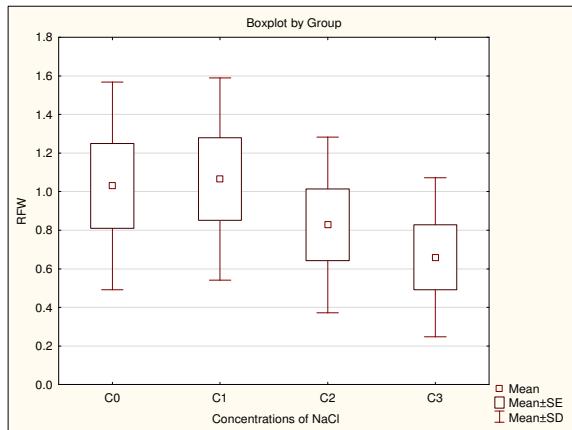
Monitoring groups	Correct assignations %	Groups assigned by DA		
		E1	E2	E3
<i>Standard DA mode</i>				
E1	62.50000	5	3	0
E2	75.00000	2	6	0
E3	75.00000	1	1	6
Total	70.83334	8	10	6
<i>Forward DA mode</i>				
E1	62.50000	5	3	0
E2	75.00000	2	6	0
E3	75.00000	0	2	6
Total	70.83334	7	11	6



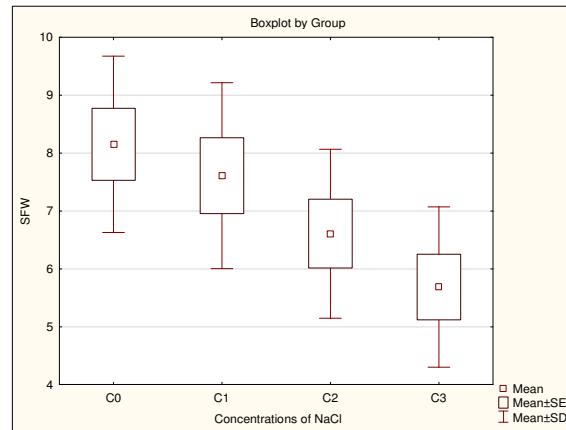
(a)



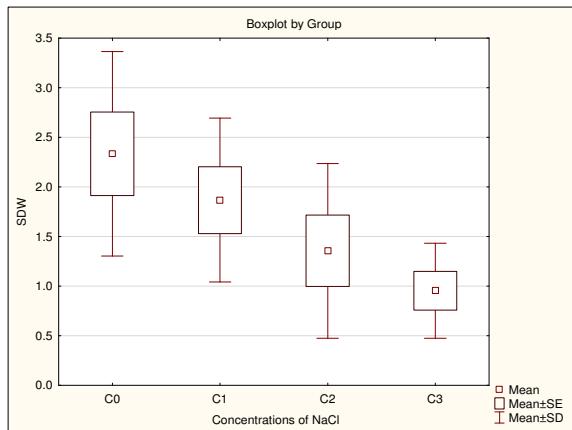
(b)



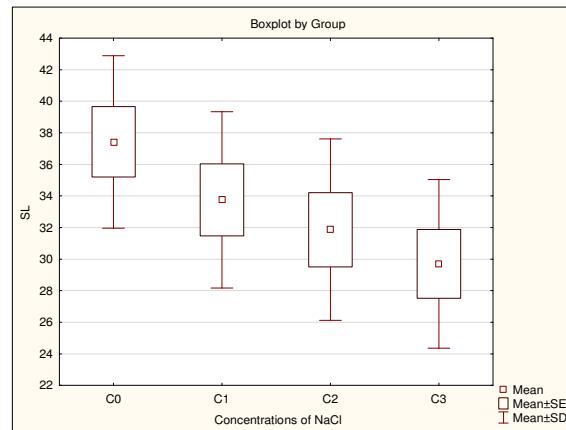
(c)



(d)

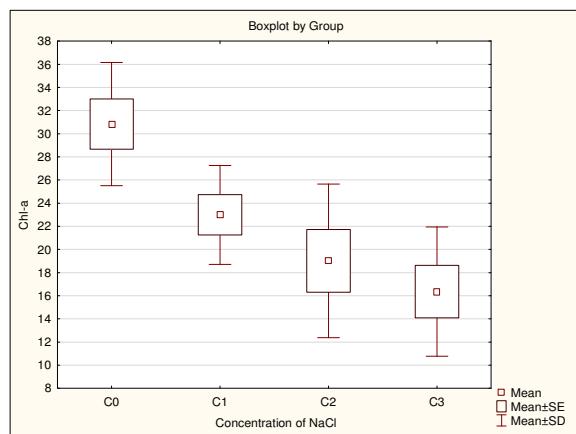


(e)

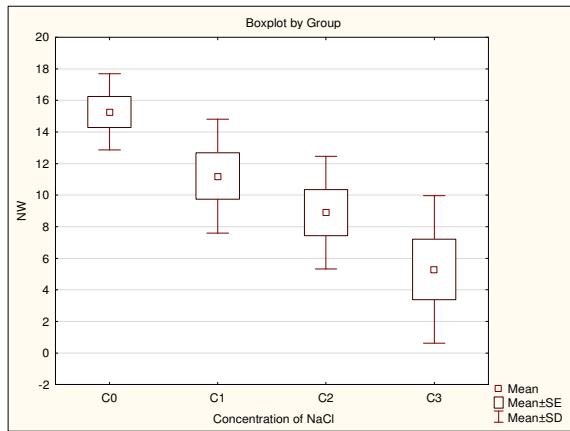


(f)

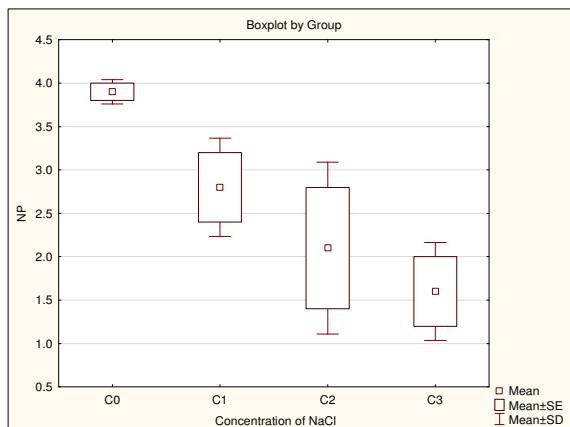
Supplementary Figure 1a. Box and whisker plots- influence of NaCl concentrations on morphophysiological parameters A) RL B) LA C) RFW D) SFW E) SDW F) SL



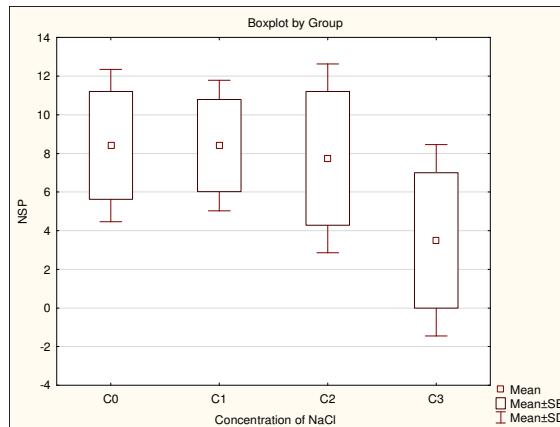
Supplementary Figure 1b. Box and whisker plots- influence of various NaCl concentration on photosynthetic samples -Chl-a



Supplementary Figure 1c. Box and whisker plots- influence of various NaCl concentration on nodulation samples -NW

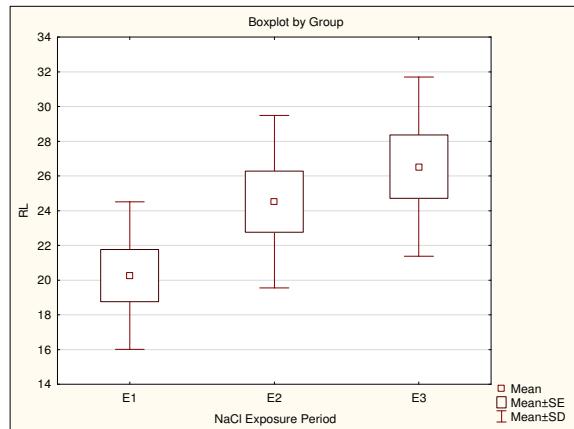


(a)

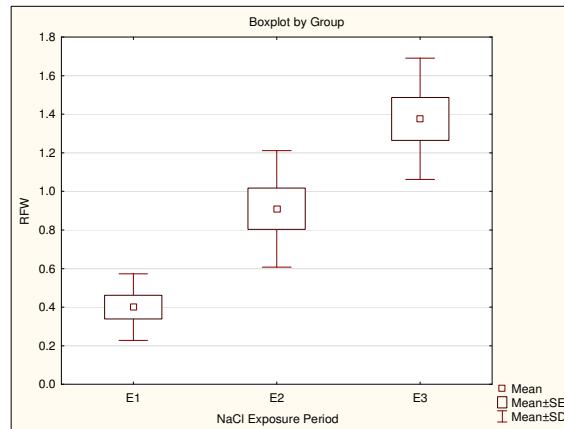


(b)

Supplementary Figure 1d. Box and whisker plots- influence of various NaCl concentration on yield samples -a) NP b) NSP

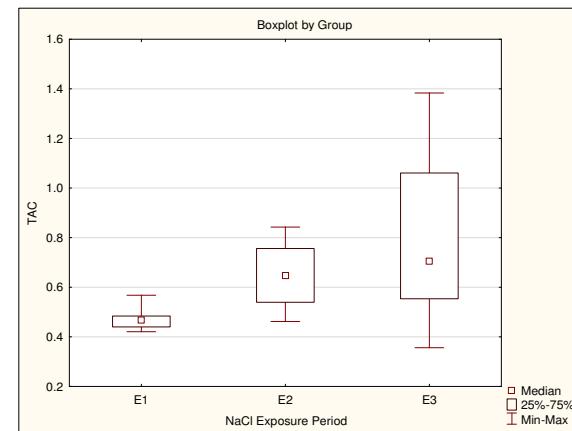
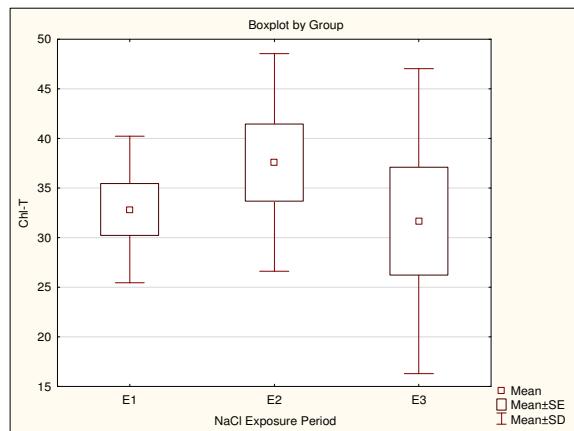


(a)



(b)

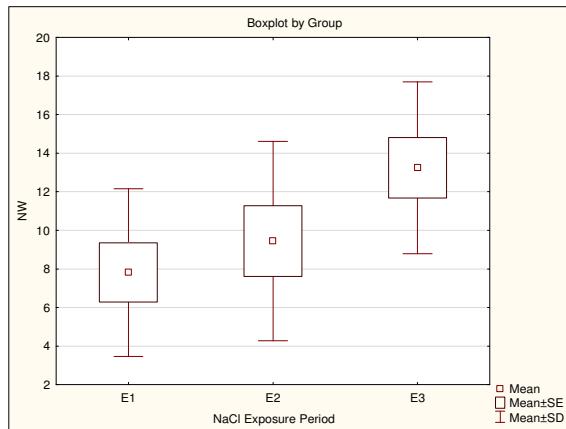
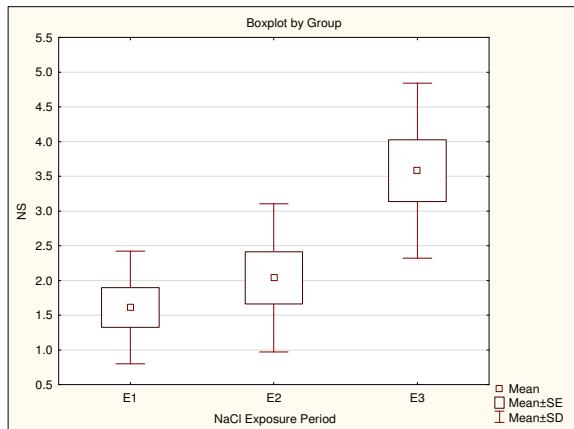
Supplementary Figure 2a. Box whisker plots- influence of various NaCl exposure period on morphophysiological samples -a) RL b) RFW



(a)

(b)

Supplementary Figure 2b. Box and whisker plots- influence of various NaCl exposure period on photosynthetic samples – a) Chl T b) TAC



(a)

(b)

Supplementary Figure 2c. Box and whisker plots- influence of various NaCl exposure period on nodulation samples – a) NS b) NW

Supplementary Table 3a. Pearson's correlation among variations in the morphophysiological, photosynthetic and nodulation parameters in mungbean plants exposed to different concentrations NaCl for different durations

	SL	RL	SB	LA	SFW	RFW	SDW	RDW	STWC	RTWC	Chl-a	Chl-b	Chl-T	TCC	TAC	NN	NS	NW
SL	1																	
RL	.865**	1																
SB	.851**	.753**	1															
LA	.918**	.849**	.930**	1														
SFW	.856**	.899**	.861**	.909**	1													
RFW	.828**	.846**	.906**	.894**	.932**	1												
SDW	.899**	.828**	.917**	.933**	.885**	.886**	1											
RDW	.797**	.795**	.866**	.836**	.819**	.886**	.901**	1										
STWC	-.873**	-.737**	-.858**	-.853**	-.755**	-.769**	-.955**	-.810**	1									
RTWC	-.412*	-.0343	-.0346	-.0337	-.0249	-.0274	-.489*	-.653**	.496*	1								
Chl-a	.765**	.663**	.546**	.682**	.612**	.438*	.661**	.477*	-.651**	-.329	1							
Chl-b	.615**	.560**	.0313	.515*	.484*	.0261	.475*	.0261	-.464*	-.154	.932**	1						
Chl-T	.726**	.639**	.476*	.636**	.578**	.0385	.608**	.411*	-.598**	-.275	.992**	.969**	1					
TCC	.844**	.805**	.753**	.879**	.767**	.675**	.841**	.736**	-.772**	-.480*	.880**	.761**	.853**	1				
TAC	.822**	.745**	.861**	.890**	.793**	.774**	.863**	.792**	-.764**	-.407*	.745**	.575**	.699**	.908**	1			
NN	.959**	.843**	.906**	.956**	.866**	.833**	.944**	.839**	-.900**	-.440*	.771**	.596**	.724**	.898**	.906**	1		
NS	.893**	.848**	.893**	.904**	.894**	.852**	.932**	.874**	-.869**	-.509*	.665**	.452*	.603**	.812**	.839**	.935**	1	
NW	.896**	.867**	.778**	.866**	.872**	.766**	.872**	.741**	-.834**	-.0394	.754**	.614**	.718**	.812**	.766**	.905**	.939**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Supplementary Table 3b. Pearson's correlation among variations in the morphophysiological, photosynthetic and nodulation and yield parameters in mungbean plants exposed to different concentrations NaCl at 45 days after salt treatment.

	SL	RL	SB	LA	SFW	RFW	SDW	RDW	STWC	RTWC	Chl-a	Chl-b	Chl-T	TCC	TAC	NN	NS	NW	NP	FWP	NSP	SW-1000
SL	1																					
RL	.885**	1																				
SB	.929**	.830*	1																			
LA	.945**	.839**	.956**	1																		
SFW	.965**	.929**	.911**	.884**	1																	
RFW	.945**	.948**	.837**	.869**	.955**	1																
SDW	.967**	.880**	.877**	.901**	.967**	.928**	1															
RDW	.831**	.930**	.787*	.736*	.933**	.907**	.878**	1														
STWC	-.952**	-.844**	-.831**	-.872**	-.936**	-.897**	-.992**	-.833*	1													
RTWC	-.710*	-.823*	-.682*	-.580*	-.861*	-.768*	-.799*	-.954**	.761**	1												
Chl-a	.938**	.760*	.972**	.936**	.913**	.822*	.913**	.762*	.880**	-.678	1											
Chl-b	.979**	.806*	.959**	.961**	.933**	.883**	.944**	.773*	.922**	-.657	.985**	1										
Chl-T	.954**	.776*	.971**	.947**	.922**	.844**	.925**	.768*	.895**	-.674	.999**	.993**	1									
TCC	.956**	.848**	.983**	.978**	.932**	.869**	.938**	.808*	.905**	-.703	.979**	.979**	.982**	1								
TAC	.934**	.806*	.981**	.963**	.910**	.855**	.882**	.759*	.834*	-.640	.975**	.970**	.977**	.975**	1							
NN	.982**	.867**	.957**	.959**	.961**	.905**	.958**	.812*	.935**	-.716*	.966**	.983**	.974**	.980**	.967**	1						
NS	.927**	.872**	.935**	.891**	.965**	.859**	.949**	.876*	.920**	-.844**	.940**	.927**	.939**	.956**	.920**	.965**	1					
NW	.988**	.910*	.917**	.919**	.977**	.937**	.967**	.852**	.955**	-.763*	.918**	.953**	.931**	.943**	.914**	.983**	.953**	1				
NP	.973**	.854**	.942**	.930**	.974**	.906**	.980**	.860**	.955**	-.783*	.972**	.980**	.978**	.975**	.949**	.985**	.974**	.968**	1			
FWP	.957**	.955**	.922**	.939**	.968**	.973**	.946**	.913**	.905**	-.782*	.895**	.928**	.908**	.947**	.925**	.948**	.923**	.950**	.948**	1		
NSP	.780*	.839**	.591	.694	.792*	.880**	.774	.717	.765*	-.597	.579	.675	.610	.650	.658	.754*	.689	.808*	.716*	.805*	1	
SW-1000	.881**	.846**	.712*	.764*	.846**	.892**	.814*	.704	.819*	-.582	.694	.785*	.724*	.735*	.739*	.839**	.751*	.902**	.784*	.823*	.922**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

