

Supplementary Table (S1): Ecological Risk Assessment Parameters and Their Contamination Levels.

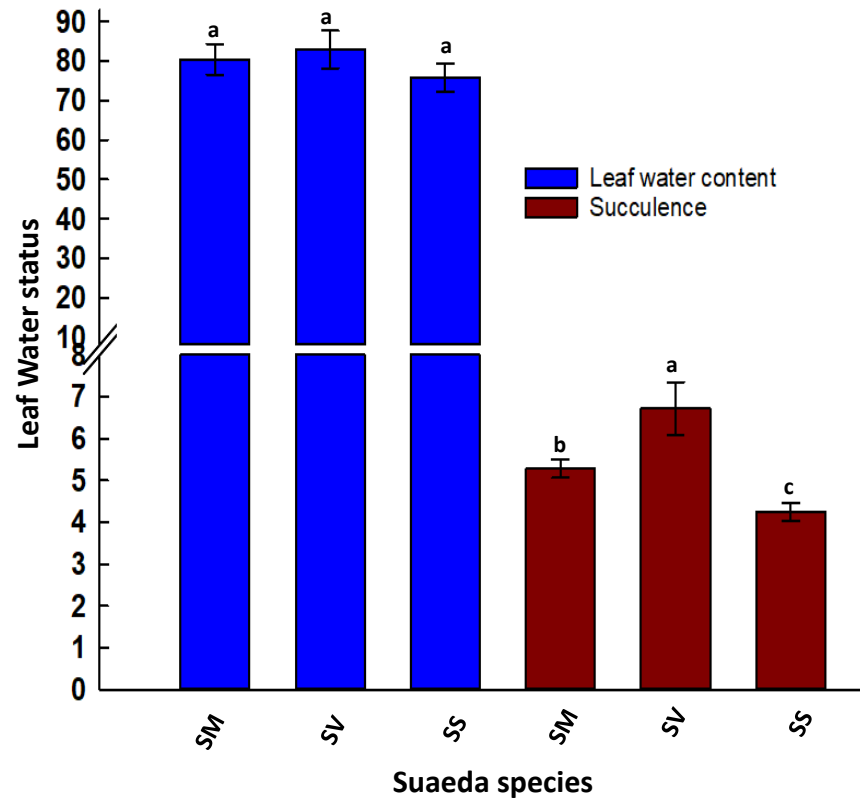
Ecological risk assessment parameters	Value	Contamination levels
Geo-accumulation index (I_{geo})	$0 < I_{geo} < 1$	Uncontaminated
	$1 < I_{geo} < 2$	Slightly contaminated
	$2 < I_{geo} < 3$	Moderately contaminated
	$3 < I_{geo} < 4$	Moderately to highly contaminated
	$4 < I_{geo} < 5$	Highly contaminated
	$5 > I_{geo}$	Extremely contaminated
Enrichment factor (E_f)	$0 < E_f < 1$	No enrichment
	$1 < E_f < 3$	Minor enrichment
	$3 < E_f < 5$	Moderate enrichment
	$5 < E_f < 10$	Moderate to severe enrichment
	$10 < E_f < 25$	Severe enrichment
	$25 < E_f < 50$	Very severe enrichment
The contamination factor (Cf)	$C_F < 2$	Minimal contamination
	$2 \leq C_F < 5$	Moderate contamination.
	$5 \leq C_F < 20$	Significant contamination
	$20 \leq C_F < 40$	Very high contamination
	$C_F > 40$	Extremely high contamination
Pollution Load Index (P_{LI})	$0 < P_{LI} \leq 1$	Unpolluted
	$1 < P_{LI} \leq 2$	Moderately to unpolluted
	$2 < P_{LI} \leq 3$	Moderately polluted
	$3 < P_{LI} \leq 4$	Moderately to highly polluted
	$4 < P_{LI} \leq 5$	Highly polluted
	$P_{LI} > 5$	Very highly polluted
Contamination degree (C_D)	$C_D < 7$	Low degree of contamination
	$7 \leq C_D < 14$	Moderate degree of contamination
	$14 \leq C_D < 28$	Considerable degree of contamination
	$C_D \geq 28$	Very high degree of contamination
Modified degree of contamination (mCD)	$mCD < 1.5$	Very low contamination
	$1.5 \leq mCD < 2.2$	Low contamination
	$2.2 \leq mCD < 4.4$	Moderate contamination
	$4.4 \leq mCD < 8.8$	High contamination
	$8.8 \leq mCD < 16.16$	Very high contamination
	$16.16 \leq mCD < 32$	Extremely high contamination
	$mCD \geq 32$	Ultra high contamination
Potential ecological risk index (E_r^i)	$E_r^i < 40$	low risk
	$40 \leq E_r^i < 80$	Moderate risk
	$80 \leq E_r^i < 160$	Considerable risk
	$160 \leq E_r^i < 320$	High risk
	$320 \leq E_r^i$	Very high risk

Supplementary Table (S2): Mean values of Metrological data in the study area

Months	Min. Temperature (°C)	Max. Temperature (°C)	Avg. Temperature (°C)	Precipitation (mm)
January	21	31.3	26.1	24
February	21.4	32.2	26.8	18
March	23.2	34.7	28.9	15
April	25	37.8	31.4	15
May	27.2	40.7	33.9	16
June	29	42.6	35.8	7
July	30.1	41.8	35.9	8
August	29.9	41	35.4	18
September	27.9	40.9	34.4	20
October	25.2	38.4	31.8	12
November	23.6	35.3	29.4	9
December	21.6	32.8	27.2	29

Supplementary Table (S3): Correlation values among physiological attributes in the tested *Suaeda species*.

	TSS	Sucrose	Starch	T. Chl.	Leaf N	Leaf C	Leaf C/N	Leaf Na	Leaf K	Leaf K/Na	Leaf P	Protein	T.AA	MDA	H ₂ O ₂	TF	TPh	Glutathione
Sucrose	0.54																	
Starch	0.35	0.49																
T. Chl.	-0.33	-0.14	-0.41															
Leaf N	0.20	0.50	0.01	0.72														
Leaf C	0.35	0.61	0.83	0.04	0.45													
Leaf C/N	0.09	-0.40	0.17	-0.78	-0.93	-0.23												
Leaf Na	-0.49	-0.74	-0.75	-0.07	-0.56	-0.97	0.33											
Leaf K	-0.14	-0.35	-0.46	-0.47	-0.59	-0.85	0.40	0.83										
Leaf K/Na	-0.67	-0.86	-0.78	0.40	-0.30	-0.73	0.12	0.78	0.31									
Leaf P	0.21	0.59	0.09	0.67	0.99	0.52	-0.96	-0.63	-0.61	-0.39								
Protein	0.57	0.87	0.41	0.20	0.80	0.66	-0.67	-0.79	-0.50	-0.79	0.86							
T.AA	0.17	0.47	0.08	0.72	0.98	0.53	-0.90	-0.61	-0.67	-0.31	0.97	0.79						
MDA	-0.35	-0.38	-0.57	0.69	0.44	-0.24	-0.50	0.26	-0.08	0.51	0.37	-0.05	0.45					
H2O2	-0.54	-0.42	-0.55	0.92	0.48	-0.15	-0.58	0.18	-0.32	0.65	0.41	-0.11	0.49	0.82				
TF	-0.47	-0.32	-0.42	0.97	0.61	-0.02	-0.69	0.04	-0.40	0.51	0.54	0.03	0.63	0.76	0.97			
TPh	-0.49	-0.27	-0.39	0.96	0.59	0.04	-0.67	-0.02	-0.49	0.50	0.53	0.04	0.61	0.73	0.97	0.97		
Glutathione	0.30	0.68	0.58	0.37	0.77	0.89	-0.61	-0.93	-0.85	-0.64	0.81	0.82	0.82	-0.02	0.10	0.27	0.29	
betacyanin	-0.62	-0.68	-0.64	0.80	0.21	-0.39	-0.34	0.44	-0.09	0.84	0.11	-0.40	0.21	0.71	0.92	0.89	0.86	-0.18



Supplementary Figure S1. Leaf water content and leaf succulence. Shown are the mean values of three .biological replicates. SM: *S. monoica*, SV: *S. vermiculata*, and SS: *S. schimperi*