

Table S1. Cultivar effects on plant growth parameters of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

NaCl (mM)	D.Za.F.I	Zi.S	LSD
Shoot length (cm)	12.3±2.3	12.0±2.7	--- ^{NS}
Branch number (unit)	13.3±1.79a	7.5±1.61b	0.450***
Branch length (cm)	8.30±1.71a	6.61±2.06b	0.316***
Stem diameter (mm)	4.86±0.3a	4.65±0.6b	0.199*
Root collar diameter (mm)	5.65±0.4a	4.53±0.8b	0.181***
Leaf width (mm)	26.3±3.8b	36.7±5.6a	1.297***
Leaf length (mm)	86.9±9.9a	64.8±9.4b	2.277***
Root fresh weight (g)	5.89±0.9	4.72±2.7	--- ^{NS}
Root dry weight (g)	0.368±0.2	0.339±0.6	--- ^{NS}
Shoot fresh weight (g)	20.08±6.6a	15.54±6.5b	1.800***
Shoot dry weight (g)	2.149±0.8a	1.812±0.6b	0.291*

*p<0.05, **p<0.01, ***p<0.001, ---^{NS}: nonsignificant

Table S2. Salt stress effects on plant growth parameters of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

NaCl (mM)	0	50	100	150	200	LSD
Shoot length (cm)	15.2±1.8A	13.1±1.2B	12.1±2.4C	10.3±1.0D	10.0±0.8D	0.804***
Branch number (unit)	11.8±3.7A	11.6±3.5A	10.1±3.3B	9.5±2.8BC	9.2±2.7C	0.712***
Branch length (cm)	9.70±3.7A	8.62±3.5B	7.60±3.3C	5.94±2.8D	5.39±2.7E	0.500***
Stem diameter (mm)	5.21±0.3A	4.90±0.3BC	4.91±0.2AB	4.59±0.2C	4.14±0.6D	0.315***
Root collar diam. (mm)	5.90±0.4A	5.24±0.6B	5.10±0.7BC	4.88±0.5C	4.33±1.0D	0.286***
Leaf width (mm)	35.9±6.7A	33.7±6.6B	30.8±7.0C	29.3±5.5CD	27.8±6.9D	2.050***
Leaf length (mm)	87.1±15A	79.8±14B	74.0±13C	69.0±13D	69.6±10D	3.601***
Root fresh weight (g)	7.28±2.4A	6.07±1.6AB	5.00±1.6BC	4.69±0.8BC	3.51±1.6C	1.867**
Root dry weight (g)	0.538±0.84A	0.372±0.08B	0.340±0.08B	0.299±0.04BC	0.220±0.09C	0.117***
Shoot fresh weight (g)	27.75±4A	21.04±2B	15.87±5C	13.45±2CD	10.95±3D	2.846***
Shoot dry weight (g)	3.105±0.8A	2.053±0.2B	1.867±0.4BC	1.561±0.1CD	1.318±0.3D	0.461***

*p<0.05, **p<0.01, ***p<0.001, ---^{NS}: nonsignificant

Table S3 Cultivar effects on stomatal parameters of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

Leaf Side	Stomatal Parameters	D.Za.F.I	Zi.S	LSD
Abaxial	Stoma width	24.9±2.2a	20.4±2.4b	0.721***
	Stoma length	44.3±4.2a	31.9±3.7b	1.253***
	Stoma density	130±30b	201±35a	10.649***
Adaxial	Stoma width	25.9±3.5a	19.2±2.3b	1.831***
	Stoma length	49.1±3.8a	32.3±3.5b	1.025***
	Stoma density	70±16b	155±26a	7.870***

Table S4. Cultivar effects on stomatal parameters of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

Leaf Side	Stomatal Parameters	NaCl (mM)					LSD
		0	50	100	150	200	
Abaxial	Stoma width	23.4±5A	22.2±3B	23.5±2A	22.2±3B	22.1±4B	1.140*
	Stoma length	39.2±8A	38.3±7AB	39.7±5A	36.8±8B	36.5±10B	1.981**
	Stoma density	187±53A	187±64A	159±23B	159±28B	135±55C	16.837***
Adaxial	Stoma width	21.6±4B	21.4±2B	23.5±6A	24.6±5A	21.6±5B	1.314***
	Stoma length	38.6±9B	39.5±8B	43.0±11A	43.2±9A	39.0±11B	1.620***
	Stoma density	130±53A	122±58A	108±48B	107±53B	94±36C	12.444***

Table S5. Cultivar effects on leaf anatomical parameters of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

Leaf Parameters	D.Za.F.I	Zi.S	LSD
LT (μm)	265.8±24b	304.9±45a	8.048***
LAbeC (μm)	27.9±6	26.2±6	--- ^{NS}
LPL (μm)	62.4±11b	77.3±8a	1.711***
WSPC (μm)	15.2±2.9b	20.6±3.9a	0.975***
LAdeC (μm)	15.5±4.0b	17.4±6.2a	1.167**

LT: Leaf Thickness, LAbeC: Length of abaxial epidermal cells, LPL: Length of palisade layer, WSPC: Width of spongy parenchyma cells, LAdeC: Length of adaxial epidermal cells

p<0.01 *p<0.001 ---^{NS}:nonsignificant

Table S6. Salt stress effects on leaf anatomical parameters of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

Parameters	NaCl (mM)					LSD
	0	50	100	150	200	
LT (μm)	316.3±51A	286.8±20BC	297.8±28B	274.3±48C	251.3±27D	12.726***
LAbeC (μm)	23.0±5D	24.3±5CD	33.3±6A	28.3±4B	26.3±5BC	2.741***
LPL (μm)	78.5±8A	72.6±6B	70.1±14B	67.2±16C	61.0±9D	2.706***
WSPC (μm)	19.7±4A	17.8±3BC	19.0±7AB	16.8±3CD	16.0±4D	1.542***
LAdeC (μm)	13.5±5B	16.7±5A	18.5±5A	16.9±6A	16.7±6A	1.846***

LT: Leaf Thickness, LAbeC: Length of abaxial epidermal cells, LPL: Length of palisade layer, WSPC: Width of spongy parenchyma cells, LAdeC: Length of adaxial epidermal cells ***p<0.001

Table S7. Cultivar effects on ion leakage, loss of turgidity, proline content and photosynthetic pigments of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

NaCl (mM)	D.Za.F.I	Zi.S	LSD
Ion leakage (%)	34.8b	45.0a	2.710***
Loss of turgor (%)	17±8	15±9	--- ^{NS}
Prolin content mg/g FW	11.19±6.3a	9.33±5.3b	1.200***
Minimum Fluorescence (F ₀)	252±19b	281±25a	4.980***
Chlorophyll-a	1.684±0.2a	1.178±0.6b	0.210***
Chlorophyll-b	0.603±0.0a	0.515±0.2b	0.065**
Total Chlorophyll	2.559±0.2a	1.922±0.9b	0.300***
Total Carotenoid	0.568±0.1	0.508±0.2	--- ^{NS}

*p<0.05, **p<0.01, ***p<0.001, ---^{NS}: nonsignificant

Table S8 Salt stress effects on ion leakage, loss of turgidity, proline content and photosynthetic pigments of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

NaCl (mM)	0	50	100	150	200	LSD
Ion leakage (%)	26.8±2D	30.2±4D	41.6±11C	46.7±7B	54.2±9A	4.285***
Loss of turgor (%)	4.5±3C	12.7±4B	13.7±6B	22.6±4A	26.6±4A	4.430***
Prolin content	3.41±0.4E	5.44±1.9D	11.45±2.1C	13.78±1.0B	17.73±4.0A	1.898***
Minimum Fluorescence (Fo’)	278±37A	265±27B	270±24BC	259±22C	259±15C	7.873***
Chlorophyll-a	1.722±0.2A	1.571±0.3AB	1.440±0.5ABC	1.274±0.7BC	1.145±0.6C	0.332*
Chlorophyll-b	0.673±0.1A	0.606±0.1AB	0.531±0.1BC	0.525±0.2BC	0.459±0.2C	0.102**
Total Chlorophyll	2,696±0.3A	2,449±0.3AB	2,216±0.6BC	2,035±0.9BC	1,806±0.8C	0.054**
Total Carotenoid	0.659±0.1A	0.571±0.1AB	0.517±0.1B	0.487±0.2B	0.458±0.1B	0.118*

*p<0.05, **p<0.01, ***p<0.001, ---^{NS}: nonsignificant

Table S9. Cultivar effects on plant nutrient content in roots and aerial parts of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

Plan Nutrient	Root			Aerial Part		
	D.Za.F.I	Zi.S	LSD	D.Za.F.I	Zi.S	LSD
P	0.66±0.1a	0.50±0.2b	0.102**	0.75±0.04b	1.10±0.13a	0.070***
K	1.43±0.8	1.14±0.6	--- ^{NS}	5.86±0.6a	4.61±2.5b	0.544***
Ca	0.30±0.06b	0.50±0.18a	0.092***	0.93±0.3a	0.68±0.2b	0.106***
Mg	1.07±0.29	0.98±0.37	--- ^{NS}	1.78±0.2	1.92±0.2	--- ^{NS}
Na	1.95±0.4	1.96±0.8	--- ^{NS}	1.28±1.2b	2.27±1.7a	0.470***
Na/K	2.19±1.9	2.58±1.5	--- ^{NS}	0.23±0.2b	0.49±0.6a	0.117***
Na/Ca	6.58±1.7a	4.33±1.8b	1.346**	1.26±1.0b	2.86a±2.1	0.561***
Cl	1.2±0.3	1.4±0.5	--- ^{NS}	2.7±1.1	3.0±1.3	--- ^{NS}
Fe	237±61	245±74	--- ^{NS}	188±52a	144±12b	27.377**
Cu	40.6±2.2b	51.1±13.1a	7.241**	42.8±3.8a	39.9±3.8b	2.746*
Mn	25.8±7.3b	58.1±24a	15.015***	230±32	249±46	--- ^{NS}
Zn	146±41a	90±13b	24.697***	172±21	187±56	--- ^{NS}

*p<0.05, **p<0.01, ***p<0.001, ---^{NS}: nonsignificant

Table S10. Salt stress effects on plant nutrient elements in root and aerial parts of *Zinnia marylandica* ‘Double Zahara Fire Improved’ (D.Za.F.I) and *Zinnia elegans* ‘Zinnita Scarlet’ (Zi.S)

Tissue	NaCl (mM)	P	K	Ca	Mg	Na	Na/K	Na/Ca	Cl	Fe	Cu
Root	0	0.57±0.1	1.68±0.5A	0.29±0.1	1.46±0.3A	1.11±0.3B	0.76±0.5	4.09±1.7	0.8±0.2C	258±76	42.4±5
	50	0.58±0.1	1.80±0.9A	0.35±0.1	1.21±0.2AB	2.14±0.2A	1.55±0.9	6.52±2.2	1.1±0.2BC	274±62	49.2±17
	100	0.60±0.2	0.80±0.6B	0.43±0.1	0.94±0.3BC	2.22±0.4A	3.65±1.6	5.49±1.9	1.5±0.2AB	257±69	43.3±6
	150	0.65±0.2	1.35±0.6AB	0.41±0.1	0.83±0.2C	2.20±0.3A	2.89±1.5	5.72±1.2	1.4±0.1AB	211±68	43.4±7
	200	0.50±0.2	0.80±0.3B	0.51±0.3	0.68±0.4C	2.10±0.8A	3.10±2.0	5.47±2.8	1.8±0.4A	204±44	51.1±13
	LSD	--- ^{NS}	0.781*	--- ^{NS}	0.308***	0.614**	--- ^{NS}	--- ^{NS}	0.419**	--- ^{NS}	--- ^{NS}
Aerial Part	0	0.89±0.1	4.70±1.2	0.520.1C	1.73±0.2	0.24±0.0C	0.06±0.0c	0.47±0.1b	1.1±0.2D	174±40	42.4±5
	50	0.97±0.2	5.57±0.8	0.790.3B	1.87±0.3	0.65±0.4C	0.13±0.1c	1.01±0.7b	2.4±0.6C	166±30	40.9±4
	100	0.97±0.3	5.28±3.9	0.77±0.1B	1.87±0.2	1.95±1.8B	0.42±0.4b	2.84±2.8a	3.0±0.5BC	157±15	43.4±5
	150	0.91±0.2	5.21±0.9	0.92±0.2AB	1.91±0.1	2.79±1.0A	0.57±0.3ab	3.24±1.6a	3.6±1.1AB	147±8	39.4±2
	200	0.90±0.2	5.41±1.4	1.03±0.2A	1.89±0.3	3.22±0.9A	0.61±0.5a	3.15±0.8a	4.0±0.5A	186±82	40.6±3
	LSD	--- ^{NS}	--- ^{NS}	1.167***	--- ^{NS}	0.744***	0.183***	0.889***	0.802***	--- ^{NS}	--- ^{NS}

*p<0.05, **p<0.01, ***p<0.001, ---^{NS}: nonsignificant