

**Supplemental Table S1.** Effect of salinity on plant growth and biomass of Suntop, Sunmate and CM72 25 days after treatment with 100 mM NaCl.

Genotype	Treatment	SH		RL		SFW		RFW		SDW		RDW	
		(cm)	(%Red)	(cm)		(g per plant)							
Suntop	Control	40.1b		40.9b		1.8a		0.56a		0.21a		0.07a	
	NaCl	35.4c	-12	37.5c	-8	0.8b	-55	0.38c	-33	0.09c	-53	0.04c	-39
Sunmate	Control	42.7a		45.8a		1.9a		0.53a		0.22a		0.06b	
	NaCl	30.3d	-30	28.9e	-37	0.6c	-68	0.31d	-42	0.07d	-68	0.02d	-56
CM72	Control	39.3b		40.6b		1.8a		0.46b		0.19b		0.05c	
	NaCl	34.2c	-13	32.7d	-24	0.7b	-59	0.41c	-11	0.09c	-49	0.03d	-30

Different letters indicate significant differences ( $P \leq 0.05$ ) between treatments within the 3 cultivars ( $n=4$ ). % red, reduced percentage (%) of control; SH, shoot height; RL, root length; SFW, shoot fresh weight; RFW, root fresh weight; SDW, shoot dry weight; RDW, root dry weight.

**Supplemental Table S2.** Shoot and root Na<sup>+</sup> and K<sup>+</sup> concentration and Na<sup>+</sup>/K<sup>+</sup> ratio of two wheat *cvv.*, Suntop and Sunmate, and one barley *cv.*, CM72, 25 days after treatment with 100 mM NaCl.

Genotype	Treatment	Na <sup>+</sup> (mg g <sup>-1</sup> DW)	K <sup>+</sup> (mg g <sup>-1</sup> DW)	Na <sup>+</sup> /K <sup>+</sup> ratio
<b><i>Shoot</i></b>				
Suntop	Control	0.419d	26.739a	0.016c
	100 mM NaCl	0.771b	5.978d	0.127b
Sunmate	Control	0.332e	25.893a	0.013c
	100 mM NaCl	0.950a	2.863e	0.339a
CM72	Control	0.272f	18.413b	0.015c
	100 mM NaCl	0.663c	8.740c	0.075b
<b><i>Root</i></b>				
Suntop	Control	32.398d	47.846b	0.679c
	100 mM NaCl	50.614b	12.422d	4.096b
Sunmate	Control	10.388f	47.589b	0.218c
	100 mM NaCl	67.625a	4.380e	15.566a
CM72	Control	25.057e	74.404a	0.339c
	100 mM NaCl	37.825c	27.321c	1.390c

Data were means of five independent replications. Different letters indicate significant differences ( $P \leq 0.05$ ) among the treatments and within the 3 cultivars.

**Supplemental Table S3.** Effect of salinity stress on SOD, POD, CAT, APX and GR activities and MDA contents in the shoots of Suntop, Sunmate and CM72 1, 5, 10, and 15 days after treatment with 100 mM NaCl.

Genotype	Treatment	SOD (U g <sup>-1</sup> FW)	POD (OD470 g <sup>-1</sup> min <sup>-1</sup> )	CAT (mmol g <sup>-1</sup> FW min <sup>-1</sup> )	APX (mmol g <sup>-1</sup> FW min <sup>-1</sup> )	GR (mmol g <sup>-1</sup> FW min <sup>-1</sup> )	MDA (nmol g <sup>-1</sup> FW)
<b>Day 1</b>							
Suntop	Control	192.2e	2.4d	3.6d	167.6e	3.9e	9.6e
	Na	315.6a	3.9b	7.9a	209.7a	6.6a	12.9c
Sunmate	Control	215.8d	2.7d	3.2e	179d	4.1d	11.1d
	Na	260.8c	3.3c	4.7c	193.2c	5.2c	24.4a
CM72	Control	219.5d	2.5d	3.8d	178.2d	4.2d	11.2d
	Na	280.8b	4.7a	6.3 b	200.1b	6b	14.8b
<b>Day 5</b>							
Suntop	Control	220e	2.6d	6.5d	159c	4.2d	11.8f
	Na	307.4b	6.8a	13b	194.7a	5.9b	17.3c
Sunmate	Control	258.5d	2.8d	7.2c	158.3c	4.3d	14.3d
	Na	283.6c	3.5c	12.6b	177.7b	5.2c	26.2a
Cm72	Control	258.2d	2.3e	6.4d	154.7c	4d	13.3e
	Na	324.6a	5.1b	14.6a	187.6a	8.2a	19.4b
<b>Day 10</b>							
Suntop	Control	67.4d	2.7d	5.5cd	12.4d	4.1d	8.9d
	Na	178.3a	5.7a	8.7a	18.4b	5.4b	13.5b
Sunmate	Control	82.4c	2.9cd	6c	15.3c	4.2d	9.2d
	Na	155.1b	4.2b	7b	16.9b	4.9c	18.9a
CM72	Control	77.2c	3c	5.3d	11.3d	4.1d	8.9d
	Na	176.4a	5.9a	7.4b	22.1a	7.9a	10.6c
<b>Day 15</b>							
Suntop	Control	66b	1.9e	2.4d	32.5de	3.5c	10.7d
	Na	78.6a	3.1a	4.7a	94.8a	5.7a	19.4b
Sunmate	Control	58.7c	2.1d	2.6d	35.5d	3.6c	6.4f
	Na	64.5b	2.7b	3.4bc	62.4c	4.8b	22.2a
CM72	Control	62.1bc	1.7e	2.6d	31.2e	3.6c	8.7e
	Na	75.1a	2.4c	3.8b	74.9b	5b	12.4c
	Na	50.9a	3.5b	2.7b	76a	3b	15b

**Supplemental Table S4.** Effect of salinity stress on SOD, POD, CAT, APX and GR activities and MDA contents in roots of Suntop, Sunmate and CM72 1, 5, 10, and 15 days after treatment with 100mM NaCl.

Genotype	Treatment	SOD (U g <sup>-1</sup> FW)	POD (OD470 g <sup>-1</sup> min <sup>-1</sup> )	CAT (mmol g <sup>-1</sup> FW min <sup>-1</sup> )	APX (mmol g <sup>-1</sup> FW min <sup>-1</sup> )	GR (mmol g <sup>-1</sup> FW min <sup>-1</sup> )	MDA (nmol g <sup>-1</sup> FW)
<b>Day 1</b>							
Suntop	Control	166.2e	3.9e	1.7d	160.5d	2d	5.1e
	Na	224.4b	7b	3.8a	193a	3.8b	9.9b
Sunmate	Control	177.8de	3.9e	1.6e	171.1c	2.4d	5.9d
	Na	209.4c	5.6c	2.5c	182b	3.1c	15.5a
CM72	Control	183.4d	4.8d	1.3f	169.1c	2.2d	8.1c
	Na	295.4a	7.5a	2.9b	197.9a	5.9a	10.4b
<b>Day 5</b>							
Suntop	Control	172.8cd	7.8d	1.9f	147.2c	1.3e	3.5e
	Na	196.8a	14.1a	4.4b	175.3a	3.4a	8.7b
Sunmate	Control	164.5d	9.2c	2.9d	148.3c	1.6d	4.9d
	Na	178.1bc	10.4b	4c	160.7b	2.4c	13.8a
CM72	Control	169.7cd	8.1d	2.4e	135.4d	1.2e	5.1d
	Na	188.7ab	13.8a	5.4a	174.3a	2.6b	6.8c
<b>Day 10</b>							
Suntop	Control	30.3c	1.7d	1.1c	11.5e	2.6d	5.8e
	Na	53.6a	3.8a	2.3a	20.5b	5.9a	14.6b
Sunmate	Control	35.8c	1.8d	1c	12.8de	2.4d	6.1e
	Na	42.1b	2.9c	1.8b	17.5c	4.9c	28.1a
CM72	Control	35.8c	1.6d	1.2c	15cd	2.5d	7.2d
	Na	52.1a	3.6b	2.4a	29.9a	5.2b	10.7c
<b>Day 15</b>							
Suntop	Control	24.1d	2.5d	1.6d	46.9de	1.7e	5.1e
	Na	43.3b	3.8a	2.9a	69.8b	3.4a	9.4c
Sunmate	Control	25.8d	2.5d	1.6d	49.8d	1.9d	5.9de
	Na	34.4c	3c	1.9c	60.2c	2.7c	18.1a
CM72	Control	26.9d	2e	1.4e	44.1e	1.1f	6.4d
	Na	50.9a	3.5b	2.7b	76a	3b	15b