

### Supplementary Material

#### **Siphoning novel sources of seedling salinity tolerance from the diverse chickpea landraces**

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**Table S1. Percentage reduction of different morphological traits in 50 chickpea genotypes under salt stress condition**

S. No.	Genotype	RL (cm)	SL (cm)	TF W (gm)	RF W (gm)	SFW (gm)	TD W (gm)	RD W (gm)	SD W (gm)	Overall reduction
1	ICCV-92944	48.9 8	28.2 1	35.3 0	12.0 2	53.0 1	31.5 3	15.0 6	45.0 3	33.64
2	IG5848	31.3 7	31.4 3	21.3 2	17.0 1	31.8 2	21.3 6	14.0 0	33.4 3	25.22
3	IG5856	36.5 4	50.0 0	57.8 4	62.8 0	44.8 8	54.9 0	64.7 7	30.4 4	50.27
4	IG5857	38.6 4	25.7 1	59.5 7	52.9 5	69.0 6	54.6 7	50.2 9	60.7 7	51.46
5	IG5870	41.3 0	40.5 4	38.3 2	39.4 6	34.0 1	37.2 4	41.5 5	21.6 6	36.76
6	IG5874	25.0 0	21.0 5	27.1 5	7.45	51.7 2	28.5 1	15.9 6	45.0 7	27.74
7	IG5891	32.6 9	40.8 2	25.4 7	18.5 2	33.5 1	27.7 1	25.9 3	29.8 7	29.31
8	IG5902	37.7 8	38.2 4	56.9 4	66.5 1	46.1 0	54.9 6	63.1 8	41.8 1	50.69
9	IG-5905	28.2 6	21.2 8	11.3 6	7.85	19.0 9	26.5 9	23.7 4	31.6 9	21.23
10	IG5909	33.9 3	32.5 0	69.5 3	72.1 4	63.5 8	71.4 6	74.4 4	64.5 6	60.27
11	IG5980	11.2 7	17.6 5	13.8 5	12.2 4	16.4 4	13.5 8	13.0 7	14.6 1	14.09
12	IG5988	38.7 8	40.0 0	56.8 3	53.8 5	60.6 6	45.4 5	53.7 6	33.2 6	47.82
13	IG5993	25.4 2	49.0 2	14.9 7	8.32	20.9 8	27.2 4	15.9 8	37.8 8	24.98
14	IG6001	18.8	38.4	30.3	24.6	38.8	31.2	31.4	30.8	30.59

		7	6	1	7	0	6	9	8	
15	IG5893	13.1	25.0	19.1	22.0	13.4	17.6	18.7	16.0	
		1	0	0	5	1	3	7	0	18.13
16	ILC11902	16.2	18.1	20.3	22.7	15.8	21.6	23.1	19.1	
		2	8	8	1	1	9	8	6	19.67
17	Pusa72	21.2	23.9	40.3	18.5	60.7	41.4	22.0	59.9	
		8	1	3	9	5	9	9	3	36.05
18	ILC1312	46.0	25.8	69.6	63.4	75.3	67.7	60.1	77.4	
		0	1	8	8	5	0	8	7	60.71
19	ILC-234	39.4	38.2	48.8	11.5	69.5	46.4	18.8	63.8	
		7	4	4	7	2	9	6	6	42.11
20	ILC238	18.2	37.7	46.1	35.3	58.7	46.7	37.6	57.7	
		9	8	3	5	2	0	6	3	42.30
21	ILC35	19.2	42.2	39.6	40.5	38.5	41.1	44.9	35.8	
		3	2	3	0	2	8	4	1	37.75
22	ILC5595	38.4	32.2	37.5	18.1	51.4	35.9	36.3	35.6	
		6	6	2	8	8	8	0	3	35.73
23	ILC7187	49.2	38.1	43.8	53.4	11.9	42.7	42.9	41.9	
		5	0	4	9	8	7	7	4	40.54
24	ILC8730	32.3	29.0	43.3	49.8	33.6	43.0	51.7	28.7	
		5	3	8	8	8	3	8	3	38.98
25	IG5842	14.5	34.6	23.5	24.6	12.7	19.8	22.4	13.0	
		5	2	8	9	9	4	9	6	20.70
26	IG5844(B)	25.0	26.4	47.5	57.6	29.8	46.8	60.4	26.6	
		0	7	6	9	4	7	4	0	40.06
27	ILC6062	16.6	35.2	25.8	18.3	41.8	29.2	16.5	50.1	
		7	9	2	4	0	5	1	1	29.22
28	CSG8962	13.7	14.5	14.6	16.0	11.3	10.3		14.9	
		5	5	0	4	1	0	6.90	6	12.80
29	BG-1053	29.8	24.2	17.1	19.7	14.3	12.9	24.8	42.0	
		2	4	4	0	3	7	4	5	23.14

30	BG3022	46.7 7	18.1 8	40.5 9	41.7 9	37.8 3	42.3 8	47.8 3	28.0 5	37.93
31	BGD103	35.2 9	40.0 0	49.0 2	37.2 1	61.6 8	52.0 4	39.6 8	64.9 6	47.48
32	BGD-111- 1	29.1 7	29.7 3	8.12	7.97	21.8 6	41.6 9	37.5 8	44.5 6	27.58
33	C-235	33.3 3	28.2 1	42.4 6	46.4 3	38.6 2	42.5 1	46.1 9	38.9 8	39.59
34	DCP-92-3	51.9 2	39.4 7	50.4 2	45.8 9	56.9 7	38.8 3	36.2 1	42.3 6	45.26
35	ICC1882	26.8 3	28.2 6	44.4 3	55.5 3	22.1 8	46.1 8	54.5 3	32.7 6	38.84
36	ICC4958	50.0 0	42.5 5	42.9 4	52.5 8	15.0 6	41.3 5	50.2 1	21.8 5	39.57
37	ICCV-10	14.0 8	13.4 3	14.0 4	7.62	26.8 9	11.4 0	15.2 3	6.52	13.65
38	ICCV-2	32.4 3	38.7 1	63.0 3	78.6 5	34.0 8	55.9 5	75.4 6	32.5 8	51.36
39	JG11	21.7 4	29.7 9	47.2 2	8.05	72.7 1	47.7 3	22.6 7	63.8 9	39.22
40	JG-16	24.1 9	31.4 8	24.2 9	13.5 0	38.6 4	24.7 6	19.5 0	32.2 4	26.08
41	JG-62	14.5 5	24.3 9	56.9 9	45.6 3	70.4 2	57.5 3	47.1 0	69.6 5	48.28
42	L550(K)	45.6 5	40.9 1	28.5 7	35.7 8	18.3 7	29.2 6	29.5 6	33.7 1	32.73
43	P-5023	16.3 3	28.5 7	25.1 2	28.1 4	18.0 4	31.5 8	30.1 9	33.6 0	26.45
44	Pusa1103	25.0 0	38.3 0	37.5 6	43.1 8	27.4 0	36.2 2	41.7 5	26.8 9	34.54
45	Pusa112	34.6	35.0	30.2	31.2	29.5	27.0	37.5	16.3	30.20

		9	0	7	1	2	2	8	1	
46	Pusa256	23.5	18.5	46.3	55.0	20.0	49.9	61.3	30.8	
		3	2	5	6	0	3	5	3	38.19
47	RSG888	31.4	36.1	26.4	42.1	20.7	30.9	33.6	28.6	
		3	7	2	6	5	4	7	0	31.27
48	SBD377	42.5	46.8	67.5	46.7	80.2	56.3	44.4	64.4	
		0	1	2	5	5	6	0	0	56.12
49	WR315	43.8	14.7	60.7	68.9	45.2	62.1	69.8	47.2	
		6	1	0	0	8	5	4	7	51.59
50	GNG1581	28.5	32.3	48.3	60.2	29.1	50.0	58.7	38.1	
		7	5	5	5	7	0	7	5	43.20
	<b>Max</b>	51.9	50.0	69.6	78.6	80.2	71.4	75.4	77.4	60.71
		2	0	8	5	5	6	6	7	
	<b>Min</b>	11.2	13.4	8.12	7.45	11.3	10.3	6.90	6.52	12.80
		7	3			1	0			
	<b>Average</b>	30.2	31.5	38.2	35.6	38.1	38.5	37.8	38.0	36.02
		8	2	1	1	7	2	1	4	

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**Table S2. Total root length, projected area, root surface area, average diameter, and root volume of 8 chickpea genotypes under control (C), and salt stress (S) condition, measured 30 days after sowing.**

		Root growth parameters									
		Total root length		Projected area		Surface area		Average diameter		Root volume	
		cm plants <sup>-1</sup>		cm <sup>2</sup> , plant <sup>-1</sup>		cm <sup>2</sup> plant <sup>-1</sup>		mm, root <sup>-1</sup> plant <sup>-1</sup>		cm <sup>3</sup> plant <sup>-1</sup>	
S. No.	Genotypes	C	S	C	S	C	S	C	S	C	S
1	ILC1190	573.484	444.914	42.4	30.1	133.4					
	2	9	1	2	5	2	94.84	0.74	0.68	2.47	1.61
2	IG5980	542.351	413.665	36.1	25.4	113.5					
	9	1	1	6	7	80.09	0.67	0.62	1.89	1.23	
3	CSG8962	582.546	476.016	40.5	28.3	127.4					
	1	5	4	3	8	89.10	0.70	0.60	2.22	1.33	
4	ICCV10	584.633		42.7	30.5	134.5					
	7	475.415		9	3	5	96.02	0.73	0.64	2.46	1.54
5	IG5856	588.321	312.311	45.1	19.3	141.9					
	5	8	3	2	2	60.78	0.77	0.62	2.72	0.94	
6	IG5857	552.481	289.601	35.1	14.3	110.4					
	3	5	3	3	6	45.07	0.64	0.49	1.76	0.56	
7	DCP92-3	506.908	261.041	36.6	14.0	115.3					
	9	7	6	9	0	44.33	0.72	0.54	2.08	0.60	
8	Pusa256	571.580	300.985	37.6	16.7	118.4					
	1	7	8	5	8	52.70	0.66	0.56	1.95	0.73	
	<b>Means</b>	562.788	371.743	39.5	22.3	124.3	70.36	0.70	0.59	2.19	1.06
		5	9	5	7	9					

**Table S3. Root tips, forks, and crossings of 8 chickpea genotypes under control (C), and salt stress (S) condition, measured 30 days after sowing.**

Root developmental parameters							
S. No	Genotypes	Tips, no. plant <sup>-1</sup>		Forks, no. plant <sup>-1</sup>		Crossings, no. plant <sup>-1</sup>	
		C	S	C	S	C	S
1	ILC11902	3579.00	3661.40	4353.71	3759.29	335	351
2	IG5980	3909.00	3471.00	2846.50	3071.50	219	210
3	CSG8962	3345.50	3526.60	4174.71	4183.14	307	335
4	ICCV10	3629.00	3715.75	4203.43	4419.50	291	316
5	IG5856	2353.80	1925.20	5188.71	3586.00	315	228
6	IG5857	3920.50	3591.70	4504.86	3339.86	245	205
7	DCP92-3	1916.50	1207.40	4766.00	3387.21	226	265
8	Pusa256	1959.00	1734.60	3357.14	3068.86	300	186
	<b>Means</b>	3076.53	2854.20	4174.38	3601.92	279.70	261.90