

Supplementary Materials

Table S1. Nutrient concentrations of the solutions of five SARs after 0 d

SAR	Ca	Cu	Fe	K	Mg	Mn	Na	P	S	Zn
	mmol/L									
0	8.96	0.0005	0.01	0.53	0.11	0.001	0.5	0.01	5.25	0.001
10	3.27	0.0003	0.01	0.53	0.07	0.001	16.2	0.01	6.41	0.001
20	1.62	0.0003	0.01	0.53	0.07	0.001	19.6	0.01	6.84	0.001
30	1.35	0.0003	0.01	0.54	0.07	0.001	20.5	0.01	7.09	0.001
60	1.10	0.0003	0.01	0.53	0.07	0.001	21.2	0.01	7.06	0.001

Table S2. Nutrient concentrations of the solutions of five SARs after 14 d

SAR	Ca	Cu	Fe	K	Mg	Mn	Na	P	S	Zn
	mmol/L									
0	12.0	0.0002	0.01	0.13	0.16	0.0001	0.44	0.004	7.78	119
10	3.77	0.0002	0.01	0.14	0.09	0.0000	17.2	0.004	7.69	118
20	3.09	0.0003	0.01	0.16	0.09	0.0001	18.8	0.004	7.88	120
30	1.43	0.0003	0.01	0.26	0.10	0.0001	23.1	0.004	8.56	131
60	1.24	0.0003	0.01	0.35	0.10	0.0005	23.2	0.004	8.53	130

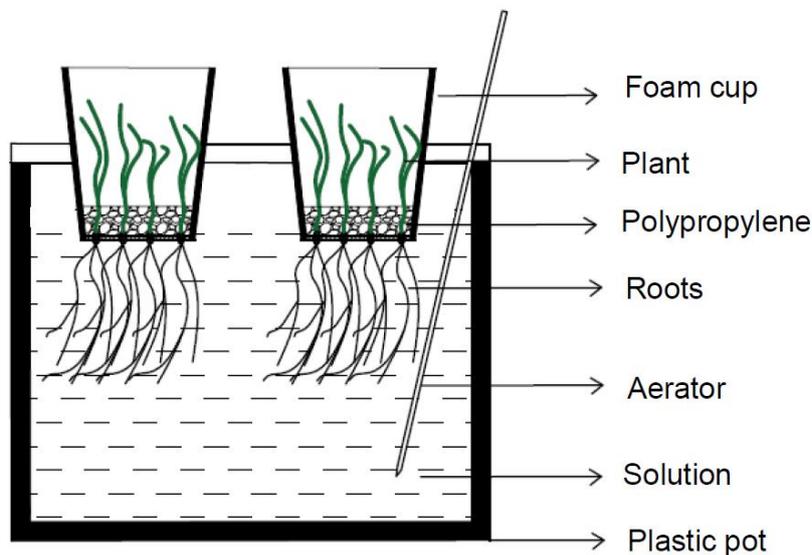


Figure S1. Transverse section of the experimental setup, showing the placement of the foam cups, the aeration filter in the bucket containing solution. The water level of the solution reached the base of the cup (without covering the seeds) which provided the seeds with enough moisture to germinate.

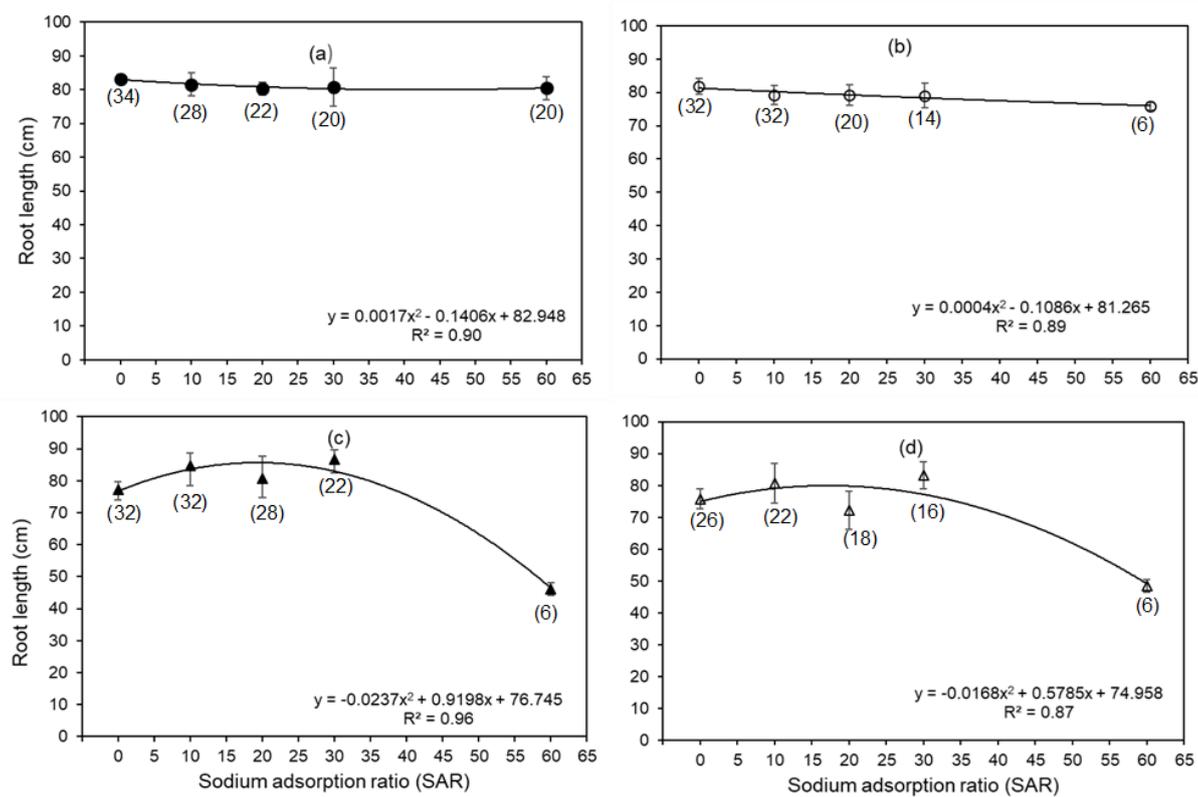


Figure S2. Maximum root length of four wheat genotypes (a) EGA Gregory, (b) Spitfire, (c) Ventura and (d) Baxter in five SAR treatments. The bars indicate the standard error of the mean. The number is presented in parenthesis and represents the number of seeds which germinated in each treatment.

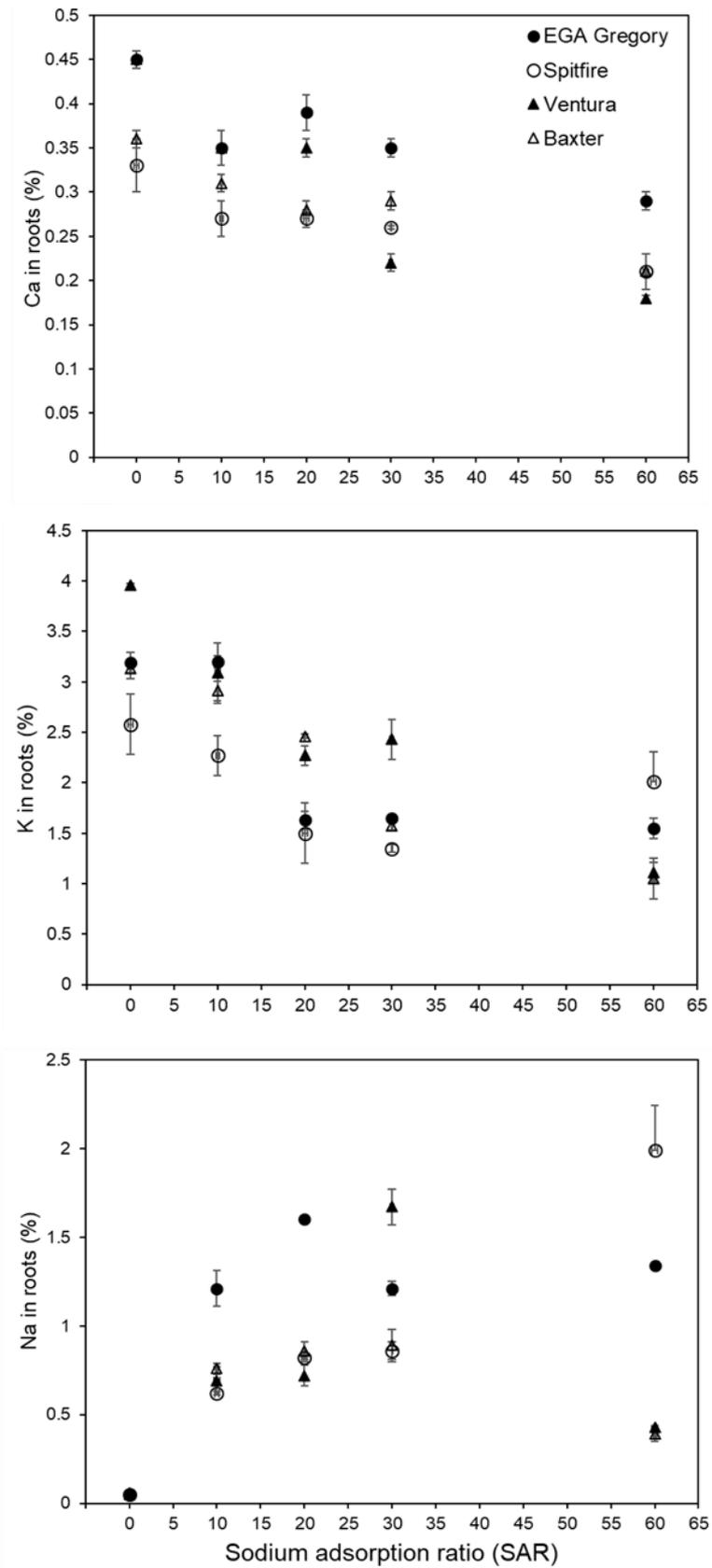


Figure S3. Nutrient concentration in roots of four wheat genotypes in five different SAR treatments. The bars indicate standard errors of the means for 4 replicates.

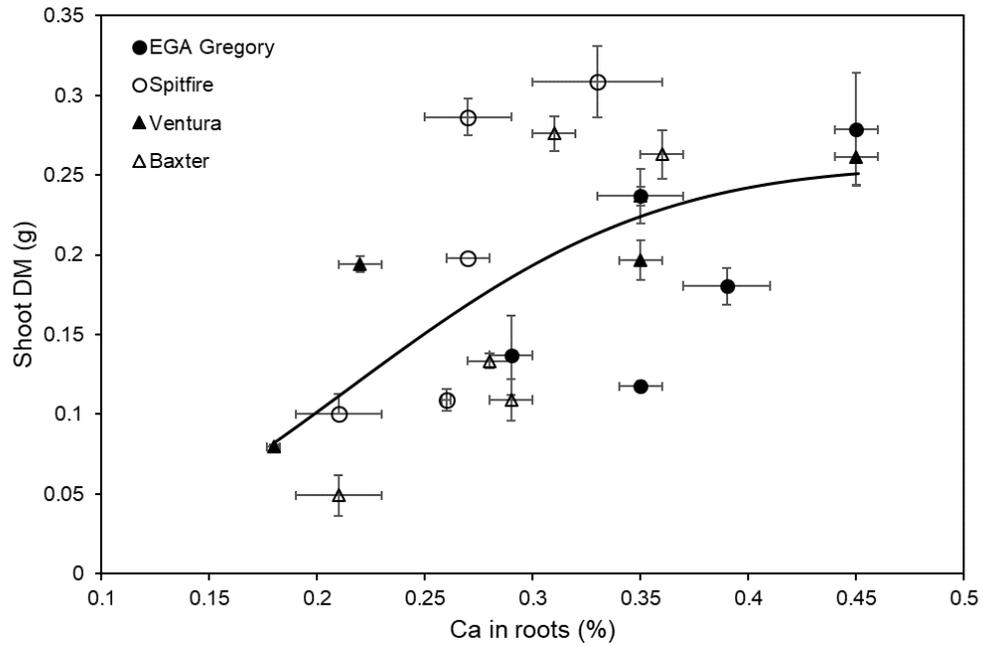


Figure S4. Relationship between Ca concentration in root and shoot DM for four wheat genotypes grown in five SAR treatments with four replicates ($R^2=0.46$, $P<0.001$). Error bars indicate standard error of the mean for 4 replicates.

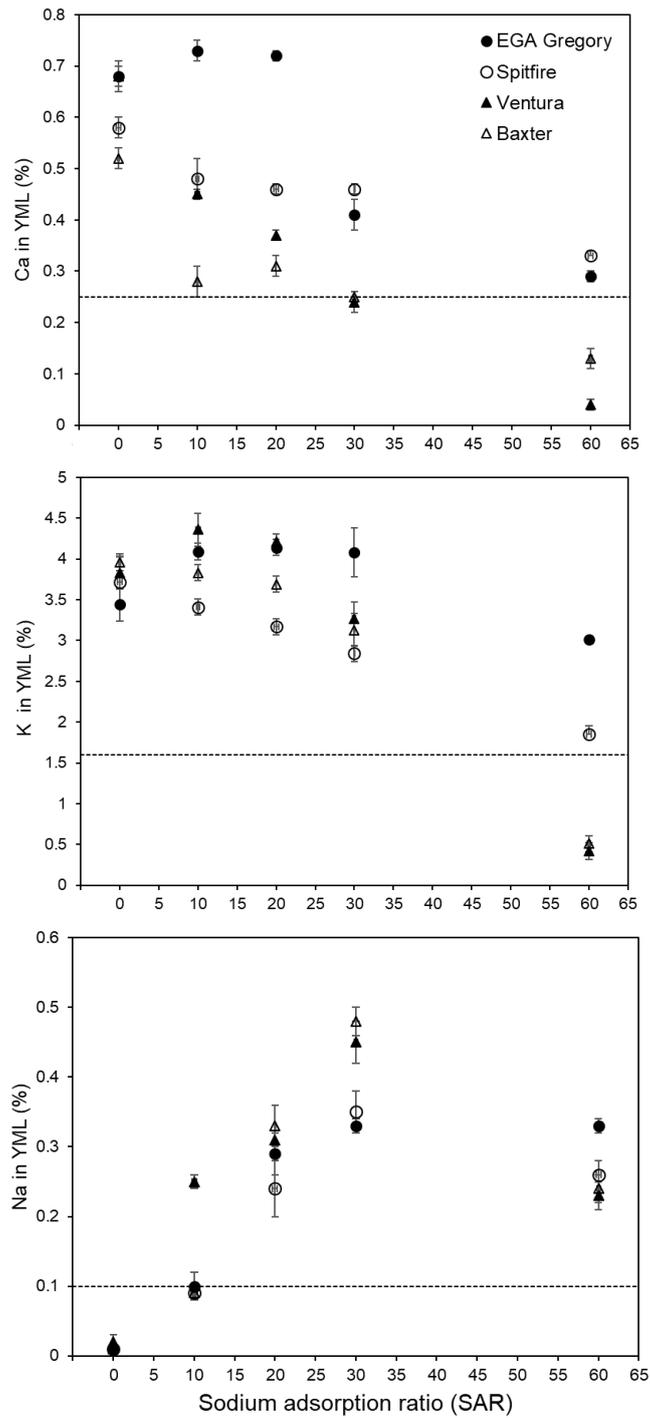


Figure S5. Nutrient (Ca, K and Na) concentration in youngest mature leaf (YML) of four wheat genotypes grown in five different SAR treatments averaged over four replicates. The bars indicate the standard error. The dotted horizontal lines present the critical concentration for deficiency for Ca and K and critical concentration for toxicity for Na in YML.

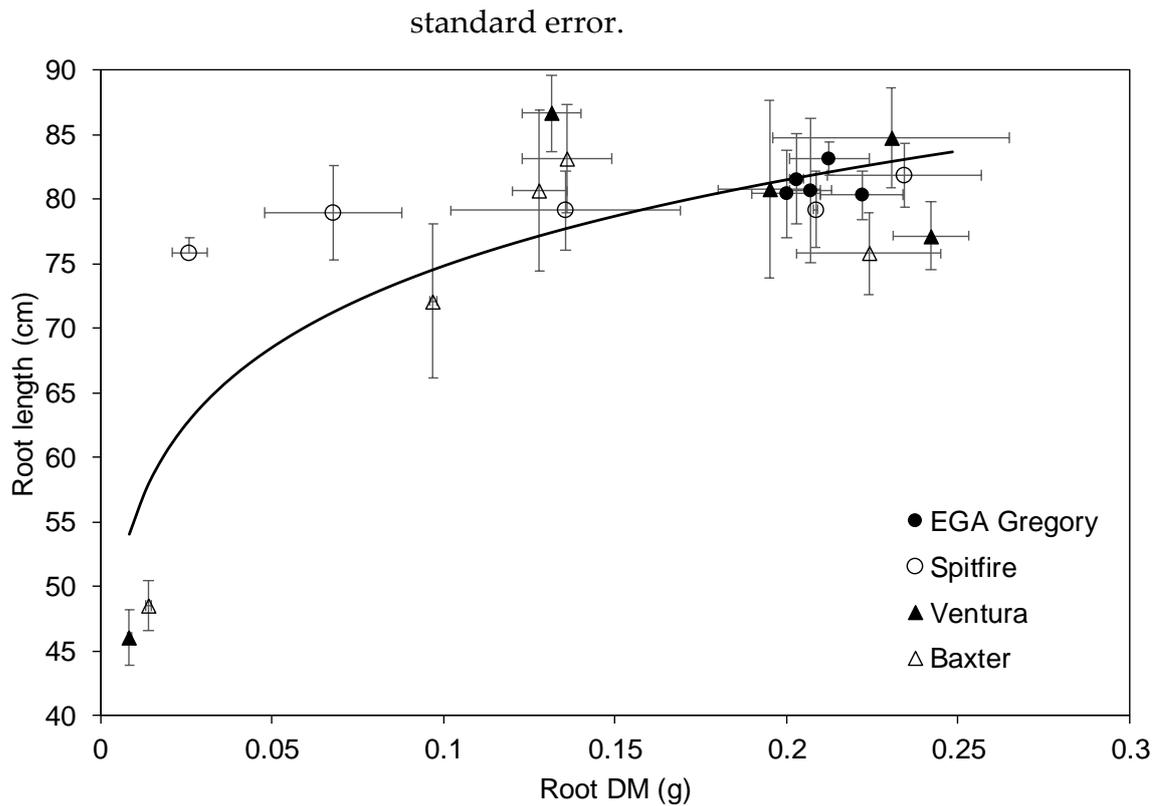


Figure S6. Relationship between root DM and root length for four wheat genotypes across five SAR values with four replicates ($R^2=0.80$, $P<0.01$). The bars present the standard error.

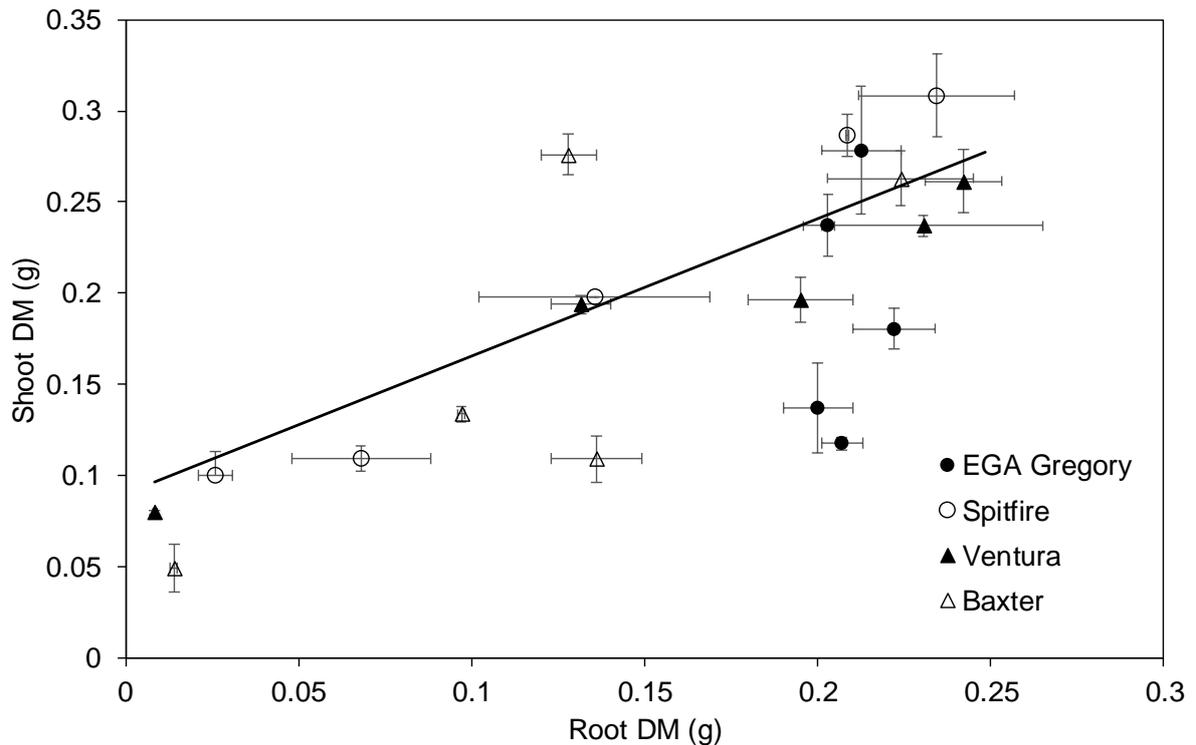


Figure S6. Relationship between root and shoot DM for four wheat genotypes grown in five SAR treatments with four replicates ($R^2=0.57$, $P<0.001$). The bars present the standard error.