

Appendix A Correlation between yield traits of the HG- and HB-IL populations measured under salt stress (S) and non-stress control (C) conditions

HG-ILs\HB-ILs	SNP (C)	SF (C)	GW (C)	GYP (C)	SNP (S)	SF (S)	GW (S)	GYP (S)
SNP (C) ¹⁾		0.01	-0.08	0.21 [*]	0.10	-0.08	-0.07	-0.09
SF (C)	-0.26 [*]		-0.15	0.44 ^{***}	-0.17	0.09	0.14	-0.02
GW (C)	-0.36 ^{***}	0.20		0.03	-0.01	0.08	0.54 ^{***}	0.20 [*]
GYP (C)	0.10	0.57 ^{***}	0.27 ^{**}		-0.14	-0.17	0.12	-0.04 [*]
SNP (S)	0.41 ^{***}	-0.28 ^{**}	-0.42 ^{***}	0.01		0.20 [*]	-0.07	0.62 ^{***}
SF (S)	-0.16	0.27 [*]	0.40 ^{***}	0.35 ^{***}	-0.35 ^{***}		0.10	0.41 ^{***}
GW (S)	-0.13	-0.15	0.66 ^{***}	-0.05	-0.25 [*]	0.34 ^{**}		0.29 ^{**}
GYP (S)	0.12	-0.16	0.04	0.15	0.41 ^{***}	0.29 ^{**}	0.25 ^{**}	

¹⁾ SNP, spikelet number/panicle; SF, spikelet fertility ; GW, thousand-grain weight; GYP, grain yield/plant. The same as below.

^{*}, ^{**} and ^{***} stand for significant differences at the 0.05, 0.01 and 0.001 probability levels, respectively.

Appendix B ANOVA results of the HG-ILs and HB-ILs for yield traits evaluated under salt stress and non-stress conditions

Pop.	Trait	SOV	Selected population			The whole population				
			df	MS	P	R ² %	df	MS	P	R ² %
Budda-ILs (n = 10 / 13)	SNP	Treatment(T)	1	273235	<.0001	79.0	1	2411386	<.0001	83.4
		ILs (G)	13	21073	0.321	6.1	105	131554	0.061	4.6
		T×G	13	14012	0.647	4.1	105	110729	0.304	3.8
	SF	Treatment(T)	1	0.010	0.196	2.6	1	0.232	<.0001	4.9
		ILs (G)	13	0.145	0.076	36.8	105	1.431	<.0001	30.1
		T×G	13	0.058	0.693	14.7	105	1.204	0.001	25.3
	GW	Treatment(T)	1	571.4	<.0001	89.1	1	4427.5	<.0001	79.4
		ILs (G)	13	31.4	0.0005	4.9	105	592.7	<.0001	10.6
		T×G	13	23.4	0.004	3.6	105	201.5	0.231	3.6
GYP	Treatment(T)	1	16232.2	<.0001	97.2	1	80952.9	<.0001	92.8	
	ILs (G)	13	66.9	0.937	0.4	105	1760.8	0.015	2.0	
	T×G	13	68.6	0.931	0.4	105	1792.6	0.011	2.1	
Gang46B-ILs (n = 6 / 9)	SNP	Treatment(T)	1	166458	<.0001	88.2	1	1996109	<.0001	77.0
		ILs (G)	9	9732	0.179	5.2	91	299598	<.0001	11.6
		T×G	5	3587	0.389	1.9	85	130286	0.015	5.0
	SF	Treatment(T)	1	0.000	0.912	0.2	1	0.262	<.0001	4.5
		ILs (G)	9	0.035	0.010	68	91	2.669	<.0001	45.8
		T×G	5	0.004	0.796	7.9	85	1.304	0.0046	22.4
	GW	Treatment(T)	1	153.0	<.0001	70.3	1	2827.5	<.0001	66.8
		ILs (G)	9	24.4	0.006	11.2	91	973.4	<.0001	23.0
		T×G	5	31.6	0.0002	14.5	85	226.4	<.0001	5.3
GYP	Treatment(T)	1	6188.7	<.0001	95.5	1	49884.2	<.0001	88.4	
	ILs (G)	9	8.2	1.000	0.1	91	2610.0	<.0001	4.6	
	T×G	5	11.1	0.987	0.2	85	1644.6	0.037	2.9	

Appendix C Mean performances of 17 promising ILs for yield traits under non-stress and salt stress conditions

Pop.	Line #	Non-stress				Salt stress			
		SNP	SF (%)	GW (g)	GYP (g)	SNP	SF (%)	GW (g)	GYP (g)
Budda-ILs	B78	261	70.6	22.8	34.0	113	82.7	15.4	2.41
	B81	257	72.5	20.2	32.9	130	90.2	14.2	2.25
	B113	297	77.7	22.0	29.7	149	83.9	15.9	2.05
	B115	277	86.1	21.4	32.6	126	90.7	15.9	2.08
	B117	244	90.3	22.8	31.3	155	87.0	16.1	3.52
	B127	281	85.4	22.7	29.9	125	83.0	16.0	2.90
	B89	262	92.7	19.6	35.2	139	82.0	13.6	1.85
	B163	243	83.8	22.0	37.0	105	74.0	15.0	1.79
	G121	291	79.4	22.3	36.6	165	77.0	15.1	1.71
	G171	214	81.7	22.2	32.8	139	78.8	14.2	1.79
	G128	266	89.5	22.7	31.6	133	84.5	15.6	1.78
	G124	243	78.4	21.0	31.1	129	80.4	13.9	1.84
	Gang46B-ILs	G139	323	72.4	22.1	30.6	118	82.6	19.2
G131		352	78.2	20.1	30.4	144	70.4	13.4	1.99
G137		242	72.5	20.7	28.2	132	86.2	16.1	2.57
G135		225	81.6	20.4	29.2	127	83.2	15.2	2.29
G151		301	71.3	20.1	28.9	151	89.0	15.0	2.27
HHZ		257	78.8	21.5	29.3	103	77.1	14.9	0.82

¹⁾ Bold numbers are those statistically significantly higher than HHZ (the recurrent parent) at $P < 0.05$.