

Supplementary Data

Identification of interspecific grain yield heterosis between two cultivated rice species *Oryza sativa* L and *Oryza glaberrima* Steud

Adedze Y.M. Nevame, Efisue Andrew, Zhang Sisong, Samoura Demba, Huang Feng, He Wenchuang, Xie Guosheng, Jin Deming*

Supplementary Table 1. Agronomic traits performance of the 64 F1 hybrids and their pollen parents.

Hybrids & pollen parents	GFP %	DF	FG	PH cm	SN	PL cm	1000GW	PY
	Average	Average	Average	Average	Average	Average	Average	Average
RL1	68.42*	103.00	135.00**	103.33**	198.00*	25.87**	2.69*	3.63**
Jin23A/RL1	71.33	98.00**	119.67**	96.67**	169.00**	27.53**	2.52*	3.02**
Zhenshan97A/RL1	79.15	101.00**	165.33**	105.00**	209.67**	28.25**	2.73	4.52**
II-32A/RL1	79.16	101.00**	210.00	115.67**	265.00	28.88**	2.75	5.77
IR58025A/RL1	73.58	101.00**	142.00**	99.33**	194.00**	27.75**	2.40**	3.40**
AF-zhong9A/RL1	83.16	101.00**	244.00	127.67	294.00	31.26**	2.40*	5.87
AF-jin23A/RL1	68.95*	101.00**	149.67**	89.00**	217.00**	30.74**	2.65	3.97**
MIS/RL1	70.43	101.00**	148.00**	96.33**	211.00**	28.67**	2.63	3.89**
M5S/RL1	72.24	98.00**	164.33*	103.67**	228.67*	31.94**	2.68	4.41*
RL2	76.76	101.00	185.67	125.67**	242.33**	28.64**	2.28**	4.24**
Jin23A/RL2	8.74*	102.00**	24.00*	116.00**	298.00	29.29**		
Zhenshan97A/RL2	3.49*	104.00**	10.667*	119.33**	311.67	30.21**		
II-32A/RL2	7.65	101.00**	23.33*	127.00	308.33	32.04**		
IR58025A/RL2	13.32*	101.00**	41.33*	112.33*	317.33	31.39**		
AF-zhong9A/RL2	13.27*	102.00**	37.00*	132.33	283.67	32.71**		
AF-jin23A/RL2	12.49*	102.00**	35.00*	119.33**	279.67	28.82**		
MIS/RL2	86.83	98.00**	202.00	125.00**	232.67*	27.81**	2.43**	4.93
M5S/RL2	69.47*	98.00**	213.00	123.67**	307.00	28.36**	2.33**	4.58**
RL3	85.62	106.00	223.33	131.67	261.67	28.64**	2.08**	4.66*
Jin23A/RL3	19.70**	99.00**	42.67**	111.67**	215.67**	31.73**	2.12**	0.91**
Zhenshan97A/RL3	65.11*	101.00**	118.67**	103.00**	182.67**	27.85**	2.10**	2.50**
II-32A/RL3	48.04**	104.00**	109.33**	120.33**	228.67*	30.45**	2.27**	2.48**
IR58025A/RL3	51.52**	118.00**	153.00**	130.33	299.00	33.53*	2.11**	3.23**
AF-zhong9A/RL3	71.076	101.00**	156.00**	126.67	219.00**	31.71**	2.32**	3.63**
AF-jin23A/RL3	41.03**	98.00**	89.67**	110.33**	220.33**	33.57**	1.96**	1.76**
MIS/RL3	66.66*	101.00**	187.67	114.33**	285.33	31.73**	2.31**	4.24**
M5S/RL3	70.28	102.33*	195	121.00*	277.67	34.9	2.31**	4.50*
RL4	60.88**	123.00	167.00*	136.00	273.67	33.90	2.45**	4.08**
Jin23A/RL4	2.97*	132.00**	5.67*	132.00	186.00*	26.87**		
Zhenshan97A/RL4	2.87*	141.00**	4.00*	129.33	162.00*	26.30**		
II-32A/RL4	0.00*	145.00	0.00*	131.00	187.67*	25.67**		
IR58025A/RL4	4.81*	123.00**	126.67*	136.00	290.00	32.00**		
AF-zhong9A/RL4	0.74*	137.00**	2.00*	133.67	267.33	32.83**		
AF-jin23A/RL4	14.30*	132.00**	39.67*	132.67	280.00	32.10**		
MIS/RL4	53.05*	108.00**	164.00*	131.67	307.67	31.12**	2.23**	3.66**
M5S/RL4	59.45*	108.00*	181.33*	134.33	313.33	30.29**	2.38**	4.31**

*and ** = significant at $P \leq 0.05$ and $P \leq 0.01$ of the probability, PH = Plant Height, DF = Day to Flowering, PL = Panicle Length, GFP = grain filling percentage, 1000-GW = thousand Grain Weight, PY = Panicle Yield, SN = Spikelet Number per panicle, FG = Filled Grain per panicle.

Supplementary Table 1. Agronomic traits performance of the 64 F1 and their respective pollen parents (contd).

Hybrids & pollen parent	GFP%	DF	FG	PH	SN	PL	100GW	PY
	average	average	average	average	average	average	average	average
Paddy	72.02	108.00	153.00*	131.00	212.67**	33.87	1.93**	2.96**
Jin23A/Paddy	3.67*	104.00**	10.667*	112.67**	290.67	33.33**		
Zhenshan97A/Paddy	4.30*	104.00**	12.33*	111.33**	286.33	31.41**		
II-32A/Paddy	9.97*	106.00**	26.67*	113.67**	261.00	31.52**		
IR58025A/Paddy	15.02*	77.00**	34.33*	109.67**	236.33*	31.59**		
AF-zhong9A/Paddy	9.85*	106.00**	30.00*	118.00**	315.00	35.83		
AF-jin23A/Paddy	3.11*	102.00**	9.00*	104.00**	293.00	26.73**		
MIS/Paddy	65.46*	101.00**	184.33*	110.33**	281.67	29.27**	2.45**	4.46**
M5S/Paddy	69.58*	101.00**	184.67*	109.00**	265.33	28.33**	2.36**	4.35**
R207	67.79*	102.00	123.33**	97.00**	181.67**	26.28**	2.14**	2.63**
Jin23AR207	85.08	101.00**	168.67*	106.67**	198.00**	27.38**	2.47**	4.17**
Zhenshan97A/R207	80.81	101.00**	167.00*	111.00**	206.33**	27.65**	2.60*	4.34**
II-32A/R207	78.76	107.00**	157.67**	113.67**	200.33**	27.40**	2.36**	3.73**
IR58025A/R207	76.48	101.00**	154.67**	94.33**	202.67**	27.40**	2.15**	3.33*
AF-zhong9A/R207	81.44	101.00**	198.00	117.33**	242.67	30.69**	2.54**	5.01
AF-jin23A/R207	63.45*	101.00**	143.67**	103.33**	226.33*	31.41**	2.42*	3.48**
MIS/R207	62.37**	118.00**	143.00*	99.67**	228.33*	29.00**	2.41**	3.26**
M5S/R207	63.80*	118.00**	151.33**	101.67**	237.00*	30.47**	2.41**	3.64**
Minghui63	75.92	106.00	166.00**	106.33*	218.33**	29.24**	2.26**	3.75**
Jin23A/Minghui63	66.71*	102.00**	167.00*	113.00**	246.67	29.67**	2.53**	4.21**
Zhenshan97A/Minghui63	80.31	102.00**	187.67	113.00**	234.67*	30.51**	2.51**	4.71*
II-32A/Minghui63	69.23*	105.00**	185.00**	121.67*	267.67	30.26**	2.41**	4.45*
IR58025A/Minghui63	73.37	101.00**	112.67**	112.00**	154.67**	28.01**	2.58*	2.91**
AFzhong9A/Minghui63	61.59**	104.00**	147.67**	129.33	237.67*	35.93	2.27**	3.37**
AF-jin23A/Minghui63	63.79**	102.00**	177.00*	116.00**	273.67	30.51**	2.45**	4.34**
MIS/RMinghui63	70.86	123.00*	188.00	122.33*	265.67	31.53**	2.40**	4.62*
M5S/Minghui63	68.33*	123.00*	179.67*	117.00**	263.00	30.98**	2.39**	4.30**
Mianhui725	71.15	106.00	216.33	111.00**	304.33	32.38	2.84	4.14
Jin23A/Mianhui725	71.76	106.00**	209.33	105.33**	293.67	29.49**	2.36**	4.95
Zhenshan97A/Mianhui725	74.22	98.00**	230.33	113.67**	310.33	30.10**	2.20**	5.06
II-32A/Mianhui725	78.42	98.00**	246.00	123.00*	313.67	34.17	2.35*	5.73
IR58025A/Mianhui725	51.17**	105.00**	115.00**	111.33**	225.33**	30.33**	2.75	3.16**
AF-zhong9A/Mianhui725	75.29	101.00**	206.33	129.33	267.00	28.66*	2.60*	5.40
AF-jin23A/Mianhui725	52.05*	101.00**	149.33**	115.00**	292.00	26.59**	2.57*	3.84**
MIS/RMianhui725	71.33	101.00**	165.67*	107.67**	232.00*	26.45**	2.35**	4.31**
M5S/Mianhui725	75.41	101.00**	183.67*	109.00**	244.33	30.57**	2.55**	4.69**

*and ** = significant at $P \leq 0.05$ and $P \leq 0.01$ of the probability, PH = Plant Height, DF = Day to Flowering, PL = Panicle Length, GFP = grain filling percentage, 1000-GW = thousand Grain Weight, PY = Panicle Yield, SN = Spikelet Number per panicle, FG = Filled Grain per panicle.