

Table S1. Chi-square analysis of the observed and expected Mendelian segregation ratio for unfavourable (AA), favourable (BB), and heterozygote (AB) alleles in the F<sub>2</sub> populations (POP).

<b>SNP ID</b>	<b>POP</b>	<b>AA</b>	<b>AB</b>	<b>BB</b>	<b>Chi-Square</b>	<b>P Value</b>
snpOS00933	IRLA	50	101	42	1.08	0.582
snpOS00934	IRLA	49	103	43	0.99	0.610
snpOS00935	IRLA	49	104	41	1.67	0.434
snpOS00938	IRLA	44	109	43	2.48	0.289
snpOS00940	IRLA	44	107	45	1.66	0.435
snpOS00941	IRLA	44	107	45	1.66	0.435
snpOS00944	IRLA	44	106	46	1.35	0.510
snpOS00945	IRLA	47	111	33	7.08	0.029*
snpOS00947	IRLA	46	118	25	16.35	0.000*
snpOS00948	IRLA	54	91	48	1.00	0.607
snpOS00933	IRNO	65	134	82	2.66	0.265
snpOS00935	IRNO	66	137	80	1.67	0.434
snpOS00940	IRNO	65	138	79	1.52	0.468
snpOS00944	IRNO	66	141	75	0.57	0.750
snpOS00945	IRNO	70	151	58	2.93	0.231
snpOS00947	IRNO	70	179	26	39.13	0.000*
snpOS00948	IRNO	61	146	76	1.88	0.391
snpOS00933	IRRL	87	171	67	3.35	0.187
snpOS00934	IRRL	89	166	69	2.67	0.264
snpOS00935	IRRL	89	168	71	2.17	0.338
snpOS00938	IRRL	92	168	65	4.86	0.088
snpOS00940	IRRL	91	170	67	3.95	0.139
snpOS00941	IRRL	91	168	67	3.84	0.147
snpOS00944	IRRL	89	170	69	2.88	0.237
snpOS00947	IRRL	74	169	65	3.45	0.178
snpOS00948	IRRL	77	155	82	0.21	0.900

\*:  $P < 0.05$

Table S2. Potential donors of *qRCA4* locus identified using SNP genotype data publicly available through the 3K Rice Genotyping Project (3KRGP).

Genotype/Variety	3KRGP IRIS ID	Country of Origin	Chr04:30302635	Chr04:30461857	Subpopulation
Y134	CX15	-	A	T	Indica
IAS 22-8 PALMAR::IRGC 26058-1	IRIS 313-10967	Brazil	A	T	Temperate japonica
CX578	CX578	-	A	T	Temperate japonica
LEUANG GLIANG::IRGC 71271-1	IRIS 313-9123	Thailand	A	T	Subtropical japonica
NAM ROO::IRGC 66996-1	IRIS 313-10176	Thailand	A	T	Subtropical japonica
CHA LOY OE::C1	IRIS 313-7856	-	A	T	Subtropical japonica
KAO SONG HAI::IRGC 61827-1	IRIS 313-11623	China	A	T	Subtropical japonica
SI NAM PUENG::IRGC 75165-1	IRIS 313-11926	Thailand	A	T	Subtropical japonica
XIENG KANG::IRGC 82533-1	IRIS 313-12063	Lao PDR	A	T	Subtropical japonica
THATENG::IRGC 86377-1	IRIS 313-12134	Lao PDR	A	T	Subtropical japonica
SET::IRGC 92200-1	IRIS 313-12227	Lao PDR	A	T	Subtropical japonica
A MOUK::IRGC 94474-1	IRIS 313-12252	Lao PDR	A	T	Subtropical japonica
BAN BONG::IRGC 94565-1	IRIS 313-12254	Lao PDR	A	T	Subtropical japonica
NYAE::IRGC 95302-1	IRIS 313-12262	Lao PDR	A	T	Subtropical japonica
TA SENG::IRGC 99176-1	IRIS 313-12312	Lao PDR	A	T	Subtropical japonica
BAN KEO::IRGC 99953-1	IRIS 313-12323	Lao PDR	A	T	Subtropical japonica
DENG NYAY::IRGC 106907-1	IRIS 313-12332	Lao PDR	A	T	Subtropical japonica
HAI NA::IRGC 107117-1	IRIS 313-12342	Lao PDR	A	T	Subtropical japonica
LAB::IRGC 107468-1	IRIS 313-12346	Lao PDR	A	T	Subtropical japonica
KHAI DO::IRGC 12903-2	IRIS 313-10679	Lao PDR	A	T	Subtropical japonica
KHAO TAM::IRGC 30085-2	IRIS 313-11093	Lao PDR	A	T	Subtropical japonica