

Table S1 - Positions of the QTLs related to Fe metabolism shown in Figure 3.

Characteristic	Chromosome ^a	Marker ^b	LOD	Additive effect ^c	Details	References
Fe accumulation in rice grains	1	RM246-RM5461	3,160	-1,6312	Explained variance (%): 15.7	Du et al., 2013
	1	RM431			Gene and locus: <i>OSZIP1</i> Os01g0972200 Position (cM): 41.5;	Nawaz et al., 2015
	1	AD121	2,71		Explained variance (%): 6.4	Vreugdenhil et al., 2004
	1	RM243-RM488	21,9	-59.05	R ² (%) ^d : 69	Anuradha et al., 2012
	1	RM488-RM490	21,9	-59.04	R ² (%) ^d : 69.2	Anuradha et al., 2012
	1	C949+0	5,1		R ² (%) ^d : 16.2	Norton et al., 2010
	2	RM145, RM555 and RM279			Gene and locus: 1. <i>OsHMA4</i> Os02g0196600; 2. Aspartate aminotransferase	Nawaz et al., 2015
	2	RM279 and RM555			Gene and locus: <i>OsACA2</i> Os02g0176700 Position (cM): 9.6;	Nawaz et al., 2015
	2	BH144	2,96		Explained variance (%): 7.3	Vreugdenhil et al., 2004
	3	MRG4864/RM5864 and RM3400			Gene and locus: <i>OsZIP2</i> Os03g0411800	Nawaz et al., 2015
	3	RM8203			Gene and locus: <i>OsCNGC14</i> Os03g0758300	Nawaz et al., 2015
	3	R1618-7	4,5		R ² (%) ^d : 21.4	Norton et al., 2010
	4	RM3217			Gene and locus: <i>OsZIP3</i> Os04g0613000	Nawaz et al., 2015
	4	RM349+0	3,4		R ² (%) ^d : 9.7	Norton et al., 2010
	5	RM161			Gene and locus: 1. <i>OsZIP5</i> Os05g0472700; 2. <i>OsZIP9</i> Os05g0472400	Nawaz et al., 2015
	5	RM574-RM122	25,3	-59.1	R ² (%) ^d : 69.2	Anuradha et al., 2012
	6	RM340-RM494	2,05	-1,3498	Explained variance (%): 10.6	Du et al., 2013
	6	RM162			Gene and locus: 1. <i>OsHMA2</i> Os06g0700700; 2. ABC transporter domain containing protein Os06g0607700	Nawaz et al., 2015
	7	RM1335			Gene and locus: 1. <i>OsNAS3</i> Os07g0689600; 2. Peroxidase Os07g0677300; 3. Potassium transporter 7	Nawaz et al., 2015
	7	RM234-RM248	27,9	59,1	R ² (%) ^d : 69	Anuradha et al., 2012
7	RM248-RM8007	27,2	59,1	R ² (%) ^d : 69	Anuradha et al., 2012	
7	R1440+0	4,9		R ² (%) ^d : 15.5	Norton et al., 2010	
8	RM4085-RM1111	4,14	1,9368	Explained variance (%): 22.3	Du et al., 2013	

Characteristic	Chromosome ^a	Marker ^b	LOD	Additive effect ^c	Details	References
Tolerance to Fe toxicity	10	RM271			Gene and locus: Os10g0456800 CHY zinc finger family protein	Nawaz et al., 2015
	12	RM19			Gene and locus: <i>OsACA9</i> Os12g0136900	Nawaz et al., 2015
	12	RM17–RM260	33,8	-59.5	R ² (%) ^d : 71	Anuradha et al., 2012
	12	RM 260–RM7102	33,4	-59.5	R ² (%) ^d : 71	Anuradha et al., 2012
	1	STSI16-RM220				Shimizu, 2009
	1	RG220B-RG810				Shimizu, 2009
	1	id1008684		0,82	R ² (%) ^d : 10.6	Wu et al., 2014
	1	id1021920		-0.72	R ² (%) ^d : 12.7	Wu et al., 2014
	1	R2417+0	4,4		R ² (%) ^d : 12.4	Norton et al., 2010
	1	RM034–RM246	7,62	-0,61	R ² (%) ^d : 18.5	Dufey et al.,2009
	1	RM443–RM403	7,92	-0,67	R ² (%) ^d : 18.1	Dufey et al.,2009
	1	RM265–RM315	3,78	0,4	R ² (%) ^d : 8.1	Dufey et al.,2009
	2	RM221-RM6				Shimizu, 2009
	2	id2013434		0,94	R ² (%) ^d : 10.3	Wu et al., 2014
	2	RM324–RM550	8,53	-1,05	R ² (%) ^d : 35.7	Dufey et al.,2009
	3	RG409+2	3,2		R ² (%) ^d : 10.6	Norton et al., 2010
	4	id4002852		0,85	R ² (%) ^d : 18.7	Wu et al., 2014
	4	id4005867		0,69	R ² (%) ^d : 9.9	Wu et al., 2014
	6	RZ516+0	3,4		R ² (%) ^d : 10.4	Norton et al., 2010
	7	RC-RM11				Shimizu, 2009
	7	id7000519		1,11	R ² (%) ^d : 11.7	Wu et al., 2014
	8	RM44-RM42				Shimizu, 2009
	11	RM254–RM224	3,74	-0,36	R ² (%) ^d : 10.5	Dufey et al.,2009
11	RM224–RM144	3,75	-0,31	R ² (%) ^d : 7.5	Dufey et al.,2009	
11	RM004b–RM019	5,24	0,75	R ² (%) ^d : 17.6	Dufey et al.,2009	
12	id12010050		0,96	R ² (%) ^d : 10.6	Wu et al., 2014	

a Chromosome number where the QTL were detected

b Marker in which is located the most probable position of the QTL

c Effect of substituting a single allele from one parent to another. Positive value indicates that the allele contributes to increase the value of the parameter and negative value indicates that the allele contributes to increase the value of the parameter

d Part of the phenotypic variation explained by the QTL (%)

LOD: likelihood ratio

References for Table S1:

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