10.1071/FP09247_AC

Accessory Publication: Functional Plant Biology, 2010, 37(7), 634–645.

Accessory Publication

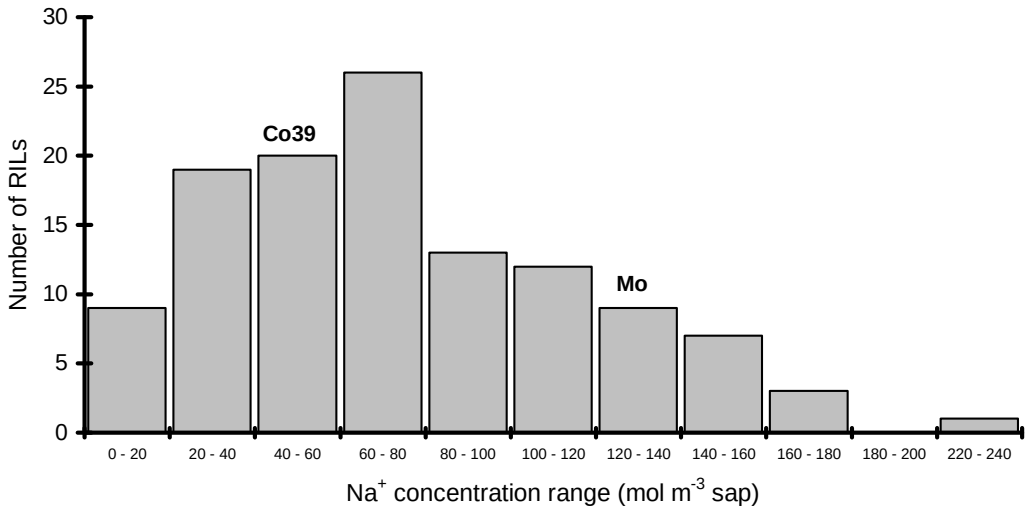

Fig. S1. Frequency distribution for Na^+ in sap from expanded leaves of the RILs grown for 21 days at 100 mol m^{-3} NaCl + 5 mol m^{-3} $CaCl_2$ (Experiment 3). Co39 and Mo indicate mean values for parents.

Table S1. Reported salt-related loci on chromosome 1 of rice

Parameter	Name	Type	Marker(s)	cM	Physical	Genotypes	Reference
Shoot K^+ concentration	*qSKC1*	QTL	C1211–S2139	93–103	9.82–>11.28	Nona Bokra × Koshihikari	Lin *et al*. 2004
Root Na^+ total	*QRNTQ-1*	QTL	C1370–C86	178–208	<38.04		Lin *et al*. 2004
Survival days	*QSDS-1*	QTL	C813–S13312	192–215	>34.28		Lin *et al*. 2004
Shoot K^+ concentration	*SKC1*	Gene	K036–Pr in PAC clone AP003567		11.42–11.48	Koshihikari × (Nona Bokra × Koshihikari NIL(*SKC1*)) BC_2F_3	Ren *et al*. 2005
Salt-induced gene	SalT	EST	SalT/AK062520		>14.61	BS125 x WL02 (*O. longistaminata*) backcross	Causse *et al*. 1994 Claes *et al*. 1990
High K^+, low Na^+	*Saltol*	Gene	Os01g20160		11.46	IR29 and RIL FL478 of Pokkali × IR29	Walia *et al*. 2005
Salt-induced gene	*SalT*	Gene	Os01g25280/ AK062520		13.88		
Shoot Na^+ and K^+	*Saltol*	QTL	*Saltol* (between C52903S and C1733S	64	12.54–13.82	Pokkali × IR29 F_8 RILs, integrated RFLP and SSLP (SSR) maps	Bonilla *et al*. 2002
Shoot Na^+ and K^+		QTL	RM140–C1733S	52–86.2	12.28–13.82	IR55178 (IR4630 × IR5324) *indica* F_6 RIL	Koyama *et al*. 2001
Shoot K^+ concentration		QTL	E12M46-6–E12M48-6	44–82	>4.63–24.3[A]		
Total shoot Na^+		QTL	E12M46-7–R886	47–96	>4.63–26.52[A]		
Shoot Na^+:K^+ ratio		QTL	E12M46-7–R886	52–95			
Survival days in salt	Std	QTL	RG612–C131			Zhaiyeqing8 × Jingxi17 doubled haploids (ZJDH)	Gong *et al*. 1999
K^+:Na^+ ratio	*Saltol*	QTL	RM3412–RM140	65–66	12.00–12.27	Pokkali × IR29 NILs	Niones 2004 cited by Mohammadi-Nejad *et al*. 2008
K^+:Na^+ ratio	*Saltol*	QTL	RM8094–CP6224			Pokkali × IR29 BC_3F_4 NILs	
Visual score	*qST1*	QTL	Est1-2-RZ569A		30–40	Milyang 23 × Gihobyeo	Lee *et al*. 2007

[A]Based on anchoring markers RM1, RM5, R886.

Table S2. Experimental conditions used for detecting salt-related loci on chromosome 1 of rice

All published references used Yoshida's medium with no added Ca^{2+} (except Walia *et al*. (2005)) and no added SiO_2

QTL/gene	Conditions	Age	Salinity	Temperature (°C)	pH	Stress duration	Reference
qSKC1 *QRNTQ-1* *QSDS-1*	Hydroponics	8 days	140 mM NaCl shock	26	5.8	10 days	Lin *et al*. 2004
SKC1	Hydroponics		140 mM NaCl			8 days	Ren *et al.* 2005
SalT	Hydroponics		1 % NaCl (171 mM) or KCl (134 mM)			7 days	Causse *et al*. 1994 Claes *et al*. 1990
Saltol *SalT*	Sand flooded	22 days	7.4 dS m^{-1} 5:1 Na : Ca ratio gradual increments	32 to 45/19 to 22	5.0–6.5	7 days	Walia *et al.* 2005
Saltol	Hydroponics	Seedlings	12 dS m^{-1} NaCl	29/21		16 days	Bonilla *et al*. 2002
(See text)	Flood bench	14 days	to 50 mM gradual	28/25		7 days	Flowers *et al*. 2000
	Sand		50 mM			75 mM	
(See text)	Hydroponics	10 days	to 50 mM gradual	28/25		1 day	Koyama *et al*. 2001
			50 mM				
			100 mM			12 days	
						8 days	
Std (survival time days)	Hydroponics	17 days	0.7% NaCl (120 mM)	26/22	5.5–6.0	Up to 17 days	Gong *et al*. 1999
qST1	Hydroponics	8 days	0.3% NaCl	30/20	5.0	4 days	Lee *et al*. 2007
			0.7% NaCl (120 mM)			14 days	
	Soil	2–3 leaf	0.5%	30/25	5.0	14 days	Lee *et al*. 2007
(See text)	Flood bench	24 days	100 mM NaCl + 10 mM $CaCl_2$	28/24		14 days	This paper
			150 mM NaCl + 15 mM $CaCl_2$			35 days	