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6 **Identification of QTLs for shoot and root growth under ionic–osmotic stress in *Lotus*,**
7 **using a RIL population**

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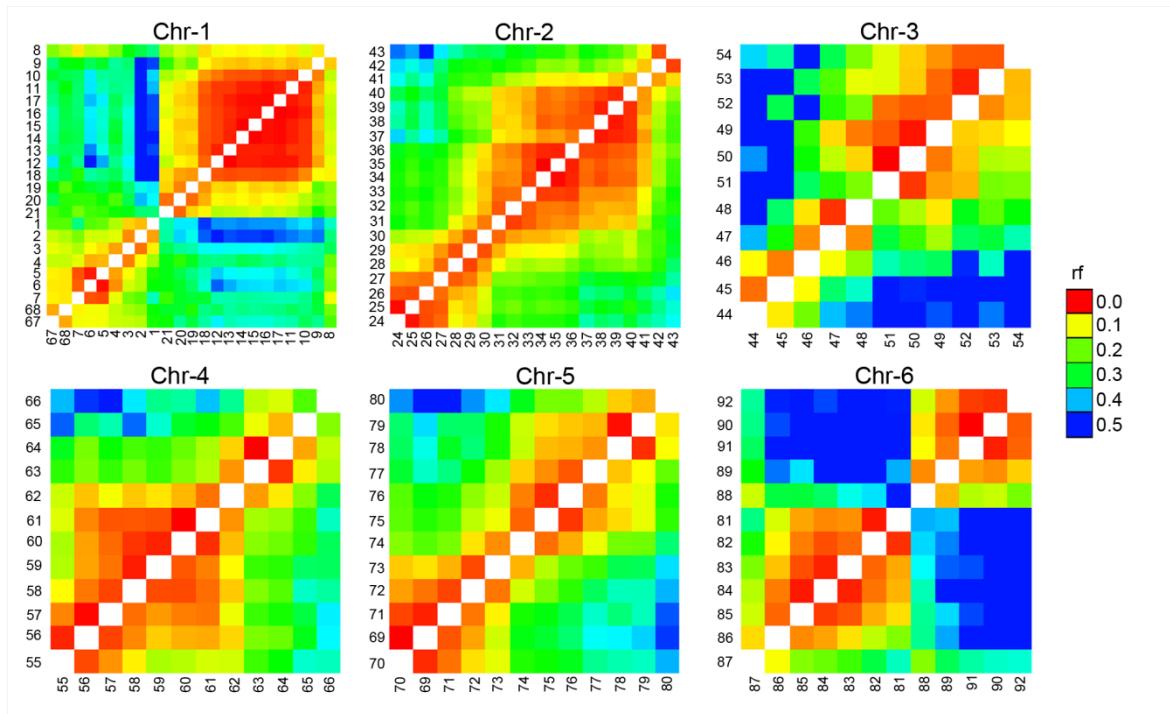
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22 **Supplementary data.**

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24 Recombination fraction (rf) and LOD matrix for the *Lotus japonicus* x *Lotus burtti* RIL population. The
 25 recombination fractions are plotted below the diagonal and the LOD Scores are plotted above the diagonal.
 26 The color scale varies from red, small distances or big LODs indicating a strong marker linkage, to dark
 27 blue indicating the reverse.



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Table S1. List of the makers and pseudo-markers associated with the QTLs detected for growth and development parameter.
 Makers identified by TM are microsatellite marker, and markers identified by number chromosome_loc-position are pseudo-marker generated by composite interval Analysis mapping (CIM, step: 10 cM)

parameter	marker	chr.	pos.	-log10(P)
RGRshoot	TM0859	3	24.9	1.35
	3_loc30	3	30.0	1.61
	TM0996	3	38.1	2.06
	3_loc40	3	40.0	2.04
	TM0005	3	44.9	1.93
	3_loc50	3	50.0	1.91
	TM0406	3	56.5	1.68
	3_loc60	3	60.0	1.39
	TM0034	5	0.0	2.11
RGRroot	TM0494	5	3.6	2.26
	TM0186	5	9.8	2.14
	5_loc10	5	10.0	2.14
	TM0299	5	16.1	2.01
	5_loc20	5	20.0	1.77
	TM0849	5	25.0	1.37
	6_loc10	6	10.0	1.43
	TM0140	6	14.1	1.51
	TM0324	1.00	0.0	2.52
RGRtotal	1_loc10	1.00	10.0	2.54
	TM0002	1.00	11.9	2.43
	1_loc20	1.00	20.0	2.32
	TM0016	1.00	28.8	1.78
	TM0145	1.00	29.9	1.70
	1_loc30	1.00	30.0	1.70
	TM0166	1.00	33.3	1.48
	1_loc40	1.00	40.0	1.34
	TM0324	1	0.0	1.71
SRR	1_loc10	1	10.0	1.34
	TM0219	4	32.5	1.41
	4_loc40	4	40.0	1.31
	TM0034	5	0.0	1.70
	TM0494	5	3.6	1.54
	TM0176	3	11.9	1.40
	3_loc20	3	20.0	1.90
	TM0859	3	24.9	2.21

3_loc30	3	30.0	2.23
TM0996	3	38.1	1.73
3_loc40	3	40.0	1.87
TM0005	3	44.9	2.17
3_loc50	3	50.0	2.33
TM0406	3	56.5	2.36
3_loc60	3	60.0	2.38
TM0049	3	62.2	2.38
3_loc70	3	70.0	2.33
TM0616	3	72.8	2.27
3_loc80	3	80.0	2.25
TM0258	3	80.3	2.25
3_loc90	3	90.0	2.12
TM0127	3	90.2	2.11
