

Supplement D. Correspondence between duplicated regions

Chr	A	B				
REgion ID1	Gene Name2	Subfamily3	Cluster4	Gene Name	Subfamily	Cluster
1-1 A	Atlg09970	LRR XI				
1-1 A	Atlg10620	PERKL				
1-1 A	Atlg10860	LRR III		Atlg60630	LRR III	
1-1 A	Atlg11050	RKF3L		Atlg60800	LRR II	
1-1 A	Atlg11140	LRR V				
1-1 A	Atlg11280	SD-1	1b	Atlg61360	SD-1	lj
1-1 A	Atlg11300	SD-1	1b	Atlg61370	SD-1	lj
1-1 A	Atlg11310	SD-1	1b	Atlg61380	SD-1	lj
1-1 A	Atlg11330	SD-1	1b	Atlg61390	SD-1	lj
1-1 A	Atlg11340	SD-1	1b	Atlg61400	SD-1	lj
1-1 A	Atlg11350	SD-1	1b	Atlg61420	SD-1	lj
1-1 A	Atlg11410	SD-1	1b	Atlg61430	SD-1	lj
1-1 A				Atlg61440	SD-1	lj
1-1 A				Atlg61460	SD-1	lj
1-1 A				Atlg61480	SD-1	lj
1-1 A				Atlg61490	SD-1	lj
1-1 A				Atlg61500	SD-1	lj
1-1 A				Atlg61550	SD-1	lj
1-1 A				Atlg61590	RLCKVII	
1-1 A				Atlg61610	SD-1	lj
1-1 A				Atlg61860	RLCKVII	
1-1 A				Atlg62090	LRR I	
1-1 A	Atlg12460	LRR VII		Atlg62950	LRR VII	
1-1 B				Atlg80870	N.A.	
1-1 B				Atlg80640	N.A.	
1-1 B	Atlg15530	L-Lectin				
1-1 B	Atlg16110	WAKL	1c	Atlg79680	WAKL	1r
1-1 B	Atlg16120	WAKL	1c	Atlg79670	WAKL	1r
1-1 B	Atlg16130	WAKL	1c			
1-1 B	Atlg16140	WAKL	1c			
1-1 B	Atlg16150	WAKL	1c			
1-1 B	Atlg16160	WAKL	1c			
1-1 B	Atlg16260	WAKL	1c'			
1-1 B	Atlg16670	LRR VIII-2				
1-1 B				Atlg79620	LRR VIII-1	
1-1 B				Atlg78980	LRR V	
1-1 B	Atlg16760	RLCK IX		Atlg78940	RLCK IX	
1-1 B				Atlg78530	LRR X	
1-1 C				Atlg72460	LRR III	
1-1 C				Atlg72540	RLCKVII	
1-1 C	Atlg17540	RLCK IX		Atlg72760	RLCK IX	
1-1 C	Atlg17750	LRR XI		Atlg73080	LRR XI	
1-1 C	Atlg17910	WAKL				
1-1 C	Atlg18390	LRR10L-1				
1-1 C	Atlg19090	DUF26				
1-1 C	Atlg19390	WAKL				
1-1 C				Atlg74360	LRR X	
1-1 C				Atlg74490	RLCKVII	
1-1 C				Atlg75640	LRR VII	
1-1 C				Atlg75820	LRR XI	
1-1 C				Atlg76360	RLCKVII	1q
1-1 C	Atlg20650	RLCKVII		Atlg76370	RLCKVII	1q
1-1 C	Atlg21210	WAKL	1d			
1-1 C	Atlg21230	WAKL	1d			
1-1 C	Atlg21240	WAKL	1d			
1-1 C	Atlg21240a	WAKL	1d			
1-1 C	Atlg21250	WAKL	1d			
1-1 C	Atlg21270	WAKL	1d			
1-1 C	Atlg21590	RLCK VI		Atlg77280	RLCK VI	
1-1 D				Atlg70740	DUF26	1p'
1-1 D				Atlg70530	DUF26	1p
1-1 D				Atlg70520	DUF26	1p
1-1 D	Atlg23540	PERKL		Atlg70460	PERKL	1o
1-1 D				Atlg70450	PERKL	1o
1-1 D				Atlg70250	Thaumatin	
1-1 D				Atlg70130	L-Lectin	1n
1-1 D				Atlg70110	L-Lectin	1n
1-1 D	Atlg24030	RLCKVII				
1-1 E	Atlg24650	LRR IX				
1-1 E	Atlg25320	LRR VII		Atlg67510	LRR VII	
1-1 E	Atlg25390	LRR10L-1		Atlg67520	SD-1	
1-1 E				Atlg67720	LRR I	
1-1 E				Atlg68400	LRR III	

Chr	A	B				
REgion ID1	Gene Name2	Subfamily3	Cluster4	Gene Name	Subfamily	Cluster
1-1 E	Atlg26150	PERKL		Atlg68690	PERKL	
1-1 E				Atlg69270	LRR X	
1-1 E				Atlg69730	WAKL	
1-1 E	Atlg26970	RLCKVII		Atlg69790	RLCKVII	
1-1 E				Atlg69910	LRR10L-1	
1-1 E	Atlg27190	LRR X		Atlg69990	LRR X	
1-2 A	Atlg05700	LRR I				
1-2 A				At2g33170	LRR XI	
1-2 A				At2g32800a		2g
1-2 A				At2g32800	L-Lectin	2g
1-2 A				At2g31880	LRR X	
1-2 A				At2g30940	RLCK V	
1-2 A	Atlg06700	RLCKVIII		At2g30740	RLCKVIII	2f
1-2 A				At2g30730	RLCKVIII	2f
1-2 A	Atlg06840	LRR VIII-1				
1-2 A				At2g29250	L-Lectin	2e
1-2 A				At2g29220	L-Lectin	2e
1-2 A	Atlg07550	LRR I	1a	At2g29010	LRR I	2d
1-2 A	Atlg07560	LRR I	1a	At2g28990	LRR I	2d
1-2 A				At2g28970	LRR I	2d
1-2 A				At2g28960	LRR I	2d
1-2 A	Atlg07570	RLCKVII		At2g28940	RLCKVII	2c
1-2 A				At2g28930	RLCKVII	2c
1-2 A	Atlg07650	LRR VIII-2				
1-2 A	Atlg07870	RLCKVII		At2g28590	RLCKVII	
1-2 A				At2g28250		
1-2 B	Atlg14370	RLCKVII		At2g02800	RLCKVII	
1-2 B	Atlg14390	LRR VI		At2g02780	LRR VI	
1-2 B				At2g02220	LRR X	
1-2 B				At2g01950	LRR X	
1-2 B				At2g01820	LRR IX	
1-2 B				At2g01210	LRR VII	
1-2 C	Atlg29720	LRR VIII-2	1e			
1-2 C	Atlg29730	LRR VIII-2	1e			
1-2 C	Atlg29740	LRR VIII-2	1e			
1-2 C	Atlg29750	LRR VIII-2	1e			
1-2 C	Atlg30570	CRPK1L 1				
1-2 C	Atlg31420	LRR X				
1-3 A	Atlg48210	RLCKVIII	1f	AT3g17410	RLCKVIII	
1-3 A	Atlg48220	RLCKVIII	1f			
1-3 A				AT3g17420	RLCK V	
1-3 A	Atlg48480	LRR III		AT3g17840	LRR III	
1-3 A	Atlg49100	LRR I				
1-3 A	Atlg49270	PERKL		AT3g18810	PERKL	
1-3 A	Atlg49730	URK I		AT3g19300	URK I	
1-3 A				AT3g19700	LRR XI	
1-3 A	Atlg50610	LRR III		AT3g20190	LRR III	
1-3 A				AT3g20200	RLCK IX	
1-3 A				AT3g20530	RLCKVII	
1-3 A	Atlg51620	N.A.				
1-3 A	Atlg51790	LRR I	1g	AT3g21340	LRR I	
1-3 A	Atlg51790a	LRR I	1g			
1-3 A	Atlg51800	LRR I	1g			
1-3 A	Atlg51810	LRR I	1g			
1-3 A	Atlg51820	LRR I	1g			
1-3 A	Atlg51830	LRR I	1g			
1-3 A	Atlg51850	LRR I	1g			
1-3 A	Atlg51860	LRR I	1g			
1-3 A	Atlg51870	LRR I	1g			
1-3 A	Atlg51880	LRR I	1g			
1-3 A	Atlg51890	LRR I	1g			
1-3 A	Atlg51910	LRR I	1g			
1-3 B	Atlg52290	PERKL				
1-3 B				AT3g16030	SD-1	
1-3 B	Atlg52310	C-Lectin				
1-3 B	Atlg52540	N.A.		AT3g15890	N.A.	
1-3 B	Atlg53420	LRR VIII-2	1h	AT3g14840	LRR VIII-2	
1-3 B	Atlg53430	LRR VIII-2	1h			
1-3 B	Atlg53440	LRR VIII-2	1h			
1-3 B	Atlg53730	LRR V		AT3g14350	LRR V	
1-3 B	Atlg54820	Extensin				
1-3 B	Atlg55200	PERKL		AT3g13690	PERKL	
1-3 B	Atlg55610	LRR X		AT3g13380	LRR X	

Supplement D. Correspondence between duplicated regions (Contd.)

Chr	A	B		Gene Name	Subfamily	Cluster	Chr	A	B		Gene Name	Subfamily	Cluster
REgion ID1	Gene Name2	Subfamily3	Cluster4				REgion ID1	Gene Name2	Subfamily3	Cluster4			
1-3 B	At1g56120	LRR VIII-2	li				2-4 B				AT4g29050	L-Lectin	
1-3 B	At1g56130	LRR VIII-2	li				2-4 B				AT4g28670	DUF26	
1-3 B	At1g56140	LRR VIII-2	li				2-4 B				AT4g28650	LRR XI	
1-3 B	At1g56140a	LRR VIII-2	li				2-4 B				AT4g28490	LRR XI	
1-3 B				AT3g13065	LRR V		2-4 B				AT4g28350	L-Lectin	
1-4 A				AT4g00330	RLCK IV		2-4 B	At2g19410	RLCK IX				
1-4 A				AT4g00340	SD-2		2-4 B	At2g20300	Extensin				
1-4 A				AT4g00960	DUF26	4a	2-4 C				AT4g38830	DUF26	
1-4 A				AT4g00970	DUF26	4a	2-4 C	At2g21480	CRPK1L 1		AT4g39110	CRPK1L 1	
1-4 A	At1g01540	RLCK V		AT4g01330	RLCK V		2-4 C				AT4g39270	LRR IV	
1-4 A				AT4g02010	Extensin		2-4 C				AT4g39400	LRR X	
1-4 A				AT4g02410	L-Lectin	4b	2-4 D	At2g23200	CRPK1L 1				
1-4 A				AT4g02420	L-Lectin	4b	2-4 D	At2g23300	LRR VII		AT4g37250	LRR VII	
1-4 A				AT4g02630	RLCK V		2-4 D	At2g23450	WAKL				
1-4 A				AT4g03230	SD-1		2-4 E	At2g23950	LRR II		AT4g30520	LRR II	
1-4 A				AT4g03390	LRR V		2-4 E				AT4g31100	WAKL	4i
1-5 A	At1g63430	LRR VI		AT5g41180	LRR VI		2-4 E				AT4g31110	WAKL	4i
1-5 A	At1g64210	LRR III		AT5g41680	LRR III		2-4 E	At2g24130	LRR XII				
1-5 A				AT5g37450	LRR VIII-1		2-4 E				AT4g31220	RLCK IX	
1-5 B	At1g65790	SD-1	1k				2-4 E				AT4g31250	LRR III	
1-5 B	At1g65800	SD-1	1k				2-4 E	At2g24230	LRR VII				
1-5 B	At1g66150	LRR IX					2-4 E	At2g24370	RLCK IX				
1-5 B	At1g66460	RLCK VI		AT5g37790	RLCK VI		2-4 E	At2g25220	N.A.		AT4g32000	N.A.	
1-5 B	At1g66830	LRR VII					2-4 E				AT4g32300	SD-2	
1-5 B	At1g66880	LRK10L-1	1l	AT5g38210	LRK10L-1	5c'	2-4 E				AT4g32710	PERKL	
1-5 B	At1g66910	LRK10L-2	1l	AT5g38240	LRK10L-2	5c	2-4 E	At2g25790	N.A.				
1-5 B	At1g66920	LRK10L-2	1l	AT5g38250	LRK10L-2	5c	3-4 A	AT3g21630	LysM				
1-5 B	At1g66930	LRK10L-2	1l	AT5g38260	LRK10L-2	5c	3-4 A	AT3g23750	LRR IX				
1-5 B	At1g66980	LRK10L-2	1m				3-4 A	AT3g24240	LRR XI				
1-5 B	At1g67000	LRK10L-2	1m	AT5g38280	Thaumatococin	5c'	3-4 A	AT3g24400	PERKL				
2-3 A	At2g36570	LRR III					3-4 A	AT3g24540	PERKL	3a			
2-3 A				AT3g53380	L-Lectin		3-4 A	AT3g24550	PERKL	3a			
2-3 A	At2g37050	LRR I		AT3g53590	LRR VIII-1		3-4 A	AT3g24660	LRR VII				
2-3 A	At2g37710	L-Lectin		AT3g53810	L-Lectin		3-4 A	AT3g24790	RLCKVII		AT4g13190	RLCKVII	
2-3 A				AT3g53840	WAKL		3-5 A	AT3g08870	L-Lectin		AT5g01540	L-Lectin	5a
2-3 A	At2g39110	RLCKVII		AT3g55450	RLCKVII		3-5 A				AT5g01550	L-Lectin	5a
2-3 A				AT3g55550	L-Lectin		3-5 A				AT5g01560	L-Lectin	5a
2-3 A	At2g39180	CR4L		AT3g55950	CR4L		3-5 A	AT3g09010	LRR VIII-2				
2-3 A	At2g39360	CRPK1L 1					3-5 A				AT5g01890	LRR VII	
2-3 A	At2g39660	RLCKVII					3-5 A				AT5g01950	LRR VIII-1	
2-3 A	AT2g40270	RLCK I		AT3g56050	RLCK I		3-5 A				AT5g02070	WAKL	
2-3 A	At2g41820	LRR X					3-5 A				AT5g02290	RLCKVII	
2-3 A				AT3g56100	LRR III		3-5 A				AT5g02800	RLCKVII	
2-3 A				AT3g56370	LRR VII		3-5 A				AT5g03140	L-Lectin	
2-3 A				AT3g57710	RLCK III	3f	3-5 A	AT3g09780	CR4L				
2-3 A				AT3g57720	RLCK III	3f	3-5 A	AT3g09830	RLCKVII		AT5g03320	RLCKVII	
2-3 A				AT3g57770	RLCK III	3f	3-5 A				AT5g05160	LRR III	
2-3 A	At2g41890	SD-3					3-5 A				AT5g06740	L-Lectin	
2-3 A	At2g41970	RLCKVIII					3-5 B				AT5g15080	RLCKVII	
2-3 A	At2g42290	LRR VII		AT3g57830	LRR VII		3-5 B	AT3g01840	N.A.				
2-3 A				AT3g58690	Extensin		3-5 B	AT3g02130	LRR X				
2-3 A	At2g42960	RLCK V		AT3g59110	RLCK V		3-5 B				AT5g15730	LRR I	
2-3 A	At2g43230	RLCKVIII		AT3g59350	RLCKVIII		3-5 B				AT5g16000	LRR II	
2-3 A				AT3g59420	CR4L		3-5 B	AT3g02810	RLCKVII		AT5g16500	RLCKVII	
2-3 A	At2g43690	L-Lectin	2h	AT3g59700	L-Lectin	3g	3-5 B	AT3g02880	LRR III		AT5g16590	LRR III	
2-3 A	At2g43700	L-Lectin	2h	AT3g59730	L-Lectin	3g	3-5 B				AT5g16900	LRR I	
2-3 A				AT3g59740	L-Lectin	3g	3-5 B	AT3g03770	LRR VI				
2-3 A				AT3g59750	L-Lectin	3g	3-5 C	AT3g26940	RLCKVII				
2-3 A	At2g45340	LRR IV					3-5 C	AT3g28040	LRR VII				
2-3 A	At2g45590	N.A.					3-5 C				AT5g40380	DUF26	
2-3 A	At2g45910	RLCK IX					3-5 D	AT3g45390	L-Lectin	3b	AT5g60300	L-Lectin	5i
2-3 A	At2g46850	N.A.					3-5 D	AT3g45410	L-Lectin	3b	AT5g60280	L-Lectin	5i
2-3 A	At2g47060	RLCKVIII		AT3g62220	RLCKVIII		3-5 D	AT3g45420	L-Lectin	3b	AT5g60270	L-Lectin	5i
2-4 A	At2g16750	RLCK VI		AT4g35030	RLCK VI		3-5 D	AT3g45430	L-Lectin	3b			
2-4 A	At2g17090	RLCK II		AT4g35230	RLCK II		3-5 D	AT3g45440	L-Lectin	3b			
2-4 A	At2g17220	RLCKVII		AT4g35600	RLCKVII		3-5 D				AT5g60090		5h
2-4 A	At2g18470	PERKL					3-5 D				AT5g60080		5h
2-4 A				AT4g36180	LRR VII		3-5 D	AT3g45860	DUF26				
2-4 B	At2g18890	RLCK VI					3-5 D	AT3g46290	CRPK1L 1	3c?	AT5g59700	CRPK1L 1	5g'
2-4 B	At2g19130	SD-2					3-5 D	AT3g46330	LRR I	3c	AT5g59680	LRR I	5g
2-4 B	At2g19190	LRR I	2b	AT4g29990	LRR I		3-5 D	AT3g46340	LRR I	3c	AT5g59670	LRR I	5g
2-4 B	At2g19210	LRR I	2b	AT4g29450	LRR I		3-5 D	AT3g46350	LRR I	3c	AT5g59660	LRR I	5g
2-4 B	At2g19230	LRR I	2b	AT4g29180	LRR I		3-5 D	AT3g46370	LRR I	3c	AT5g59650	LRR I	5g

Supplement D. Correspondence between duplicated regions (Contd.)

Chr	A			B		
	REgion ID1	Gene Name2	Subfamily3	Cluster4	Gene Name	Subfamily
3-5 D	AT3g46400	LRR I	3c			
3-5 D	AT3g46410	LRR I	3c			
3-5 D	AT3g46420	LRR I	3c			
3-5 D	AT3g46760	L-Lectin		AT5g59270	L-Lectin	5f
3-5 D				AT5g59260	L-Lectin	5f
3-5 D				AT5g59010	RLCK II	
3-5 D	AT3g47090	LRR XII	3d			
3-5 D	AT3g47110	LRR XII	3d			
3-5 D				AT5g58940	RLCK IV	
3-5 E	AT3g47570	LRR XII	3e			
3-5 E	AT3g47580	LRR XII	3e			
3-5 E				AT5g62710	LRR X	
3-5 E				AT5g63410	LRR VI	
3-5 F				AT5g66790	WAKL	
3-5 F	AT3g50230	LRR III		AT5g67200	LRR III	
3-5 F				AT5g67280	LRR VII	
4-4 A				AT4g23740	LRR III	
4-4 A	AT4g11460	DUF26	4d	AT4g23320	DUF26	4g
4-4 A	AT4g11470	DUF26	4d	AT4g23310	DUF26	4g
4-4 A	AT4g11480	DUF26	4d	AT4g23300	DUF26	4g
4-4 A	AT4g11490	DUF26	4d	AT4g23290	DUF26	4g
4-4 A	AT4g11500	DUF26	4d	AT4g23280	DUF26	4g
4-4 A	AT4g11530	DUF26	4d	AT4g23270	DUF26	4g
4-4 A				AT4g23260	DUF26	4g
4-4 A				AT4g23250	DUF26	4g
4-4 A				AT4g23240	DUF26	4g
4-4 A				AT4g23230	DUF26	4g
4-4 A				AT4g23220	DUF26	4g
4-4 A				AT4g23210	DUF26	4g
4-4 A				AT4g23200	DUF26	4g
4-4 A				AT4g23190	DUF26	4g
4-4 A				AT4g23180	DUF26	4g
4-4 A				AT4g23160	DUF26	4g
4-4 A				AT4g23150	DUF26	4g
4-4 A				AT4g23140	DUF26	4g
4-4 A				AT4g23130	DUF26	4g
4-4 A	AT4g11890	DUF26		AT4g22730	LRR IV	
4-4 A	AT4g11900	SD-1				
4-5 A	AT4g17660	RLCKVII		AT5g47070	RLCKVII	
4-5 A	AT4g18250	Thaumatin				
4-5 A				AT5g46330	LRR XII	
4-5 A				AT5g46080		
4-5 A	AT4g18640	LRR VI		AT5g45840	LRR VI	
4-5 A				AT5g45800	LRR VII	
4-5 A				AT5g45780	LRR II	
4-5 A	AT4g20140	LRR XI		AT5g44700	LRR XI	
4-5 A	AT4g20270	LRR XI				
4-5 A	AT4g20450	LRR I				
4-5 A	AT4g20790	LRR VI				
4-5 B	AT4g25160	RLCK IX		AT5g51270	RLCK IX	
4-5 B				AT5g51350	LRR IV	
4-5 B				AT5g51560	LRR IV	
4-5 B	AT4g25390	N.A.		AT5g51770	N.A.	
4-5 C				AT5g56890	Extensin	
4-5 C				AT5g56790	PERKL	
4-5 C				AT5g56460	RLCKVII	
4-5 C	AT4g26540	LRR XI		AT5g56040	LRR XI	
4-5 C				AT5g55830	L-Lectin	
4-5 C				AT5g54590	LRR I	
4-5 C				AT5g54380	CRPK1 L 1	
4-5 C				AT5g53890	LRR X	
4-5 C	AT4g27290	SD-1	4h			
4-5 C	AT4g27300	SD-1	4h			
5-5 A	AT5g10020	LRR VII				
5-5 A	AT5g10290	LRR II		AT5g65240	LRR II	
5-5 A				AT5g65500	RLCK IX	
5-5 A	AT5g10520	RLCK VI		AT5g65530	RLCK VI	
5-5 A	AT5g10530	L-Lectin		AT5g65600	L-Lectin	

1. The matching regions between two chromosomes (e.g. 1-3, chr 1 and 3).
2. The matdb designation (see supplementary table A for accessions).
3. Classification As shown in supplementary table A.
4. Tandem repeats of rlks defined with the criteria discussed in the text. The number refers to the chromosome number, and the letter refers to the numbering of clusters.