

**Supplementary Table S3** Candidate genes within the located region

<i>Gene</i>	<i>A.thaliana gene</i>	<b>Annoation</b>	<b>E-value</b>
<i>BraA09g024700.3C</i>	<i>AT3G26090</i>	ATRGS1, RGS1	0
<i>BraA09g024710.3C</i>	<i>AT3G26100</i>	CASEIN KINASE 1, CK1, CKL1	0
<i>BraA09g024720.3C</i>	<i>AT3G26110</i>	ATNAP1;1, NAP1;1,	0.0000004
<i>BraA09g024730.3C</i>	<i>AT3G26125</i>	CYP86C2	0
<i>BraA09g024740.3C</i>			
<i>BraA09g024750.3C</i>	<i>AT4G05430</i>	Carbohydrate-binding X8 domain superfamily protein;	3.00E-51
<i>BraA09g024760.3C</i>			
<i>BraA09g024770.3C</i>			
<i>BraA09g024780.3C</i>			
<i>BraA09g024790.3C</i>			
<i>BraA09g024800.3C</i>	<i>AT4G05430</i>	Carbohydrate-binding X8 domain superfamily protein;	3.00E-51
<i>BraA09g024810.3C</i>			
<i>BraA09g024820.3C</i>			
<i>BraA09g024830.3C</i>	<i>AT4G05420</i>	DDB1A	0
<i>BraA09g024840.3C</i>	<i>AT4G05410</i>	YAO, YAOZHE	0
<i>BraA09g024850.3C</i>	<i>AT4G05400</i>	copper ion binding protein	2E-115
<i>BraA09g024860.3C</i>	<i>AT4G05390</i>	ATRFNR1, RFNR1, ROOT FNR 1	0
<i>BraA09g024870.3C</i>	<i>AT4G05380</i>	P-loop nucleoside triphosphate hydrolase superfamily protein	2E-176
<i>BraA09g024880.3C</i>	<i>AT4G05330</i>	AGD13, ARF-GAP DOMAIN 13	6E-137
<i>BraA09g024890.3C</i>	<i>AT4G05320</i>	UBI10, UBIQUITIN 10, UBQ10	