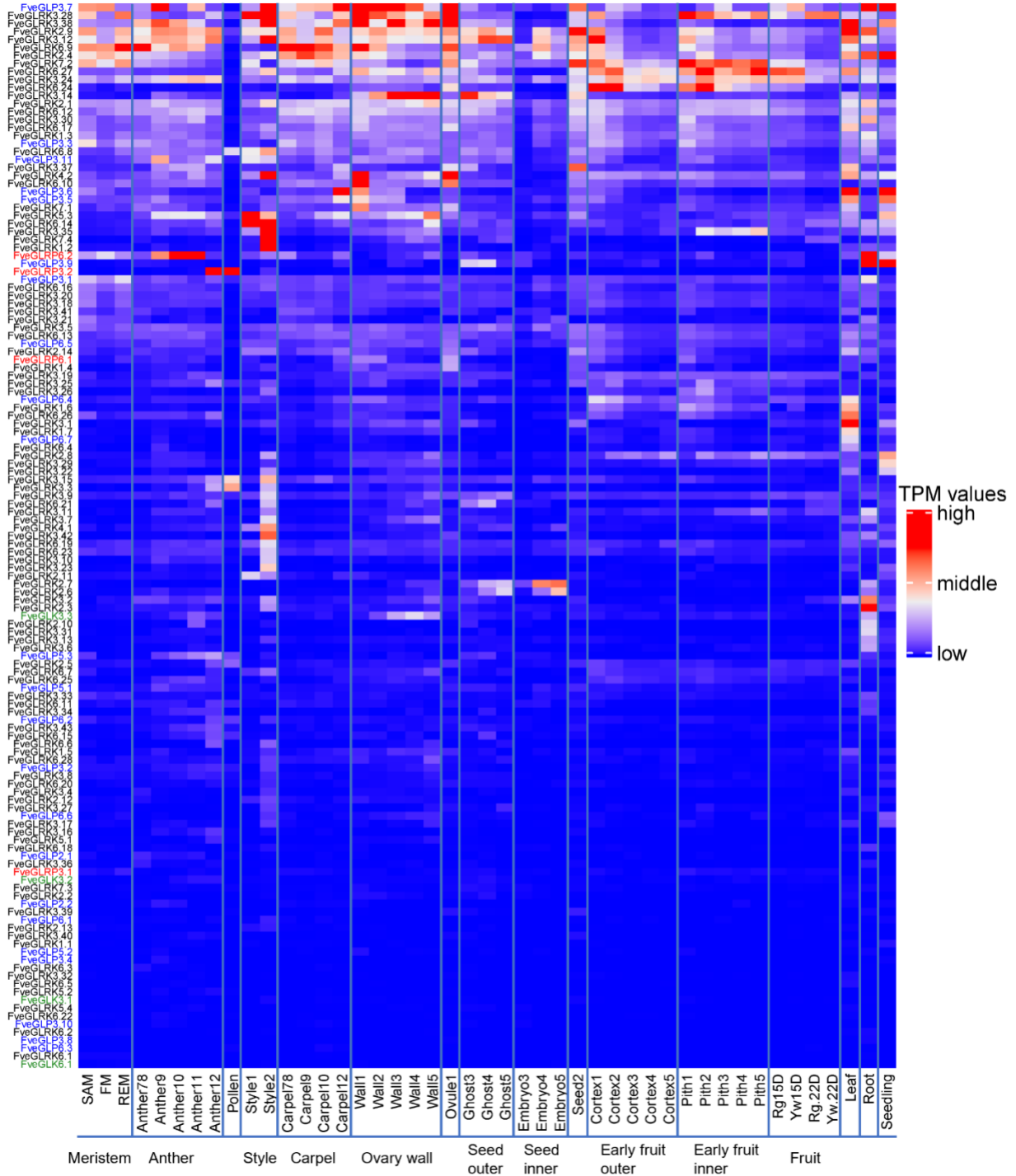
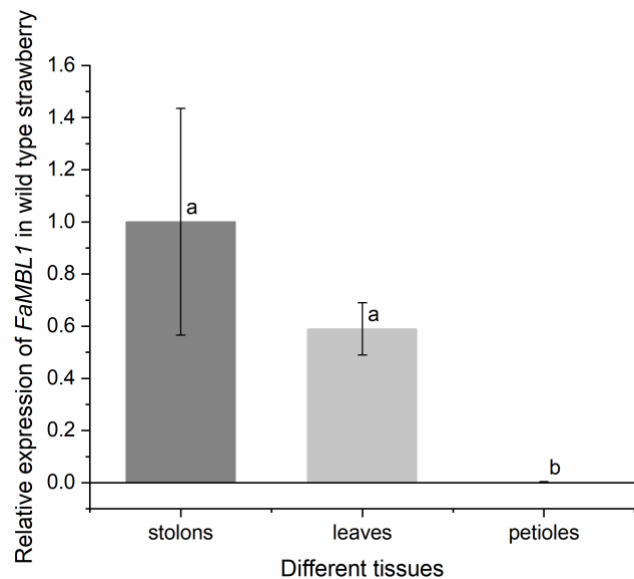


JXB supplementary data



**Fig. S1.** Expression profiles of G-type lectin genes in *Fragaria vesca* tissues and developmental stages. The different types of G-lectin genes are reported on the left in different colors: G-type lectin receptor kinases (G-LecRKs) in black, G-type lectin proteins (G-LecPs) in blue, G-type

lectin receptor proteins (G-LecRPs) in red, and G-type lectin kinases (G-LecKs) in green. The expression levels are indicated by TPM (transcript per million reads) and the TPM value for each gene is scaled before constructing the heatmap. SAM: shoot apical meristem; FM: flower meristem; REM: receptacle meristem; Anther7/8/9/10/11/12: stage 7-8/9/10/11/12 anther; Style1/2: stage1/2 style; Carpel7/8/9/10/12: stage 7-8/9/10/12 carpel; Wall1/2/3/4/5: stage 1/2/3/4/5 ovary wall; Ovule1: stage 1 ovule; Ghost3/4/5: stage 3/4/5 endosperm and seed coat; Embryo3/4/5: stage 3/4/5 embryo; Cortex1/2/3/4/5: outer part of the early fruit at stage 1/2/3/4/5; Pith1/2/3/4/5: inner part of the early fruit at stage 1/2/3/4/5; Rg.15D: green fruit stage of Rügen; Yw.15D: green fruit stage of Yellow Wonder 5AF7; Rg.22D: white fruit stage of Rügen; Yw.22D: white fruit stage of Yellow Wonder 5AF7.



**Fig. S2.** Relative expression of *FaMBL1* in different tissues of wild type strawberry (*Fragaria × ananassa*). All values were normalized to the expression level of the *elongation factor 1a* housekeeping gene. The expression of *FaMBL1* gene in stolons was regarded as 1. Each value is an average of three biological replicates with its standard deviation. Means with the same letter are not significantly different at  $P < 0.05$ .

**Table S1.** List of primer name and primer sequence with their description

<b>Primer description</b>	<b>Primer names</b>	<b>Primer sequences from 5' to 3'</b>
RT-PCR <i>FaMBL1</i> gene	FaMBL1_CUR fw	AAACCAACACGGCCAATAAG
	FaMBL1_CUR rev	GTCTGTCGGGTAGTCGAAGC
RT-PCR reference gene	FaEF1a fw	TGGATTTGAGGGTGACAACATGA
	FaEF1a rev	GTATACATCCTGAAGTGGTAGTCGGAGG
<i>FaPAL1</i>	FaPAL1 fw	TGGACTACGGCTTCAAAGGT
	FaPAL1 rev	GACATCTTGGTTGTGTTGCTC
<i>FaPGIP</i>	FaPGIP fw	ATCTCACAGGTCCCATCCAG
	FaPGIP rev	GCTGAGGAAGTCAGGGACTG
<i>FaAOS1</i>	FaAOS1 fw	AGGTTAAAGAAGGCGAGGTGTT
	FaAOS1 rev	GAGGACCGTTAGACCAAAGCA
<i>FaChi2-1</i>	FaChi2-1 fw	AAGCCCTCTTGTCACGATGT
	FaChi2-1 rev	TCGAGTCCACCGTTGATGAT
<i>FaChi2-2</i>	FaChi2-2 fw	ATGTG GGC GT GGACA AGATA
	FaChi2-2 rev	AACAG TCCAA GTTGT CCCCA
<i>FaACO</i>	FaACO fw	AGGTTAAAGAAGGCGAGGTGTT
	FaACO rev	GAGGACCGTTAGACCAAAGCA
<i>FaTLP1b</i>	FaTLP1b fw	GTGCATCACTTCTTCCAAGT
	FaTLP1b rev	CAAACCTGCTAGCAGTGAAG

**Table S2.** Proposed nomenclature for G-type lectin genes in *Fragaria vesca*

Classification	Gene ID	New Name	Classification	Gene ID	New Name
G-type lectin receptor kinase	FvH4_1g03780	FveGLRK1.1	G-type lectin receptor kinase	FvH4_5g31680	FveGLRK5.2
	FvH4_1g04840	FveGLRK1.2		FvH4_5g31930	FveGLRK5.3
	FvH4_1g16211	FveGLRK1.3		FvH4_5g32570	FveGLRK5.4
	FvH4_1g23370	FveGLRK1.4		FvH4_6g00257	FveGLRK6.1
	FvH4_1g23380	FveGLRK1.5		FvH4_6g00270	FveGLRK6.2
	FvH4_1g23390	FveGLRK1.6		FvH4_6g07960	FveGLRK6.3
	FvH4_1g23400	FveGLRK1.7		FvH4_6g12870	FveGLRK6.4
	FvH4_2g12390	FveGLRK2.1		FvH4_6g12880	FveGLRK6.5
	FvH4_2g14250	FveGLRK2.2		FvH4_6g12890	FveGLRK6.6
	FvH4_2g26490	FveGLRK2.3		FvH4_6g12930	FveGLRK6.7
	FvH4_2g29050	FveGLRK2.4		FvH4_6g20800	FveGLRK6.8
	FvH4_2g29070	FveGLRK2.5		FvH4_6g26380	FveGLRK6.9
	FvH4_2g29542	FveGLRK2.6		FvH4_6g26420	FveGLRK6.10
	FvH4_2g29543	FveGLRK2.7		FvH4_6g26450	FveGLRK6.11
	FvH4_2g29544	FveGLRK2.8		FvH4_6g29821	FveGLRK6.12
	FvH4_2g29545	FveGLRK2.9		FvH4_6g29840	FveGLRK6.13
	FvH4_2g29560	FveGLRK2.10		FvH4_6g31370	FveGLRK6.14
	FvH4_2g33830	FveGLRK2.11		FvH4_6g44063	FveGLRK6.15
	FvH4_2g33840	FveGLRK2.12		FvH4_6g44064	FveGLRK6.16
	FvH4_2g33850	FveGLRK2.13		FvH4_6g44100	FveGLRK6.17
	FvH4_2g33870	FveGLRK2.14		FvH4_6g44106	FveGLRK6.18
	FvH4_3g03230	FveGLRK3.1		FvH4_6g44107	FveGLRK6.19
	FvH4_3g03231	FveGLRK3.2		FvH4_6g44108	FveGLRK6.20
	FvH4_3g03240	FveGLRK3.3		FvH4_6g44109	FveGLRK6.21
	FvH4_3g03242	FveGLRK3.4		FvH4_6g44140	FveGLRK6.22
	FvH4_3g03243	FveGLRK3.5		FvH4_6g44190	FveGLRK6.23
	FvH4_3g03301	FveGLRK3.6		FvH4_6g44243	FveGLRK6.24
	FvH4_3g03310	FveGLRK3.7		FvH4_6g44244	FveGLRK6.25
	FvH4_3g03320	FveGLRK3.8		FvH4_6g44245	FveGLRK6.26
	FvH4_3g03350	FveGLRK3.9		FvH4_6g44310	FveGLRK6.27
	FvH4_3g03370	FveGLRK3.10		FvH4_6g51830	FveGLRK6.28
	FvH4_3g03390	FveGLRK3.11		FvH4_7g00200	FveGLRK7.1
	FvH4_3g03410	FveGLRK3.12	FvH4_7g14760	FveGLRK7.2	
FvH4_3g03420	FveGLRK3.13	FvH4_7g19680	FveGLRK7.3		
FvH4_3g03430	FveGLRK3.14	FvH4_7g30670	FveGLRK7.4		
FvH4_3g03431	FveGLRK3.15	G-type lectin protein	FvH4_2g05942	FveGLP2.1	
FvH4_3g03432	FveGLRK3.16		FvH4_2g24770	FveGLP2.2	

	FvH4_3g03433	FveGLRK3.17		FvH4_3g03322	FveGLP3.1
	FvH4_3g03450	FveGLRK3.18		FvH4_3g03340	FveGLP3.2
	FvH4_3g03451	FveGLRK3.19		FvH4_3g03435	FveGLP3.3
	FvH4_3g03461	FveGLRK3.20		FvH4_3g15150	FveGLP3.4
	FvH4_3g03481	FveGLRK3.21		FvH4_3g18370	FveGLP3.5
	FvH4_3g03482	FveGLRK3.22		FvH4_3g18371	FveGLP3.6
	FvH4_3g03501	FveGLRK3.23		FvH4_3g18380	FveGLP3.7
	FvH4_3g03502	FveGLRK3.24		FvH4_3g18382	FveGLP3.8
	FvH4_3g03520	FveGLRK3.25		FvH4_3g18383	FveGLP3.9
	FvH4_3g03521	FveGLRK3.26		FvH4_3g18410	FveGLP3.10
	FvH4_3g03560	FveGLRK3.27		FvH4_3g21271	FveGLP3.11
	FvH4_3g03590	FveGLRK3.28		FvH4_5g04270	FveGLP5.1
	FvH4_3g06140	FveGLRK3.29		FvH4_5g04310	FveGLP5.2
	FvH4_3g15080	FveGLRK3.30		FvH4_5g31690	FveGLP5.3
	FvH4_3g15120	FveGLRK3.31		FvH4_6g00300	FveGLP6.1
	FvH4_3g15130	FveGLRK3.32		FvH4_6g12332	FveGLP6.2
	FvH4_3g15690	FveGLRK3.33		FvH4_6g12920	FveGLP6.3
	FvH4_3g15930	FveGLRK3.34		FvH4_6g44062	FveGLP6.4
	FvH4_3g21270	FveGLRK3.35		FvH4_6g44101	FveGLP6.5
	FvH4_3g21310	FveGLRK3.36		FvH4_6g44242	FveGLP6.6
	FvH4_3g21320	FveGLRK3.37		FvH4_6g44260	FveGLP6.7
	FvH4_3g21400	FveGLRK3.38		FvH4_3g03241	FveGLK3.1
	FvH4_3g43401	FveGLRK3.39	G-type lectin kinase	FvH4_3g03300	FveGLK3.2
	FvH4_3g43402	FveGLRK3.40		FvH4_3g15980	FveGLK3.3
	FvH4_3g43403	FveGLRK3.41		FvH4_6g44240	FveGLK6.1
	FvH4_3g43440	FveGLRK3.42			
	FvH4_3g43710	FveGLRK3.43	G-type lectin receptor protein	FvH4_3g03581	FveGLRP3.1
	FvH4_4g02170	FveGLRK4.1		FvH4_3g15090	FveGLRP3.2
	FvH4_4g33230	FveGLRK4.2		FvH4_6g10470	FveGLRP6.1
	FvH4_5g04350	FveGLRK5.1		FvH4_6g17930	FveGLRP6.2

**Table S3.** MIQE checklist for authors, reviewers, and editors.

ITEM TO CHECK	IMPORTANCE	CHECKLIST
<b>EXPERIMENTAL DESIGN</b>		
Definition of experimental and control groups	E	Yes
Number within each group	E	N/A
Assay carried out by core lab or investigator's lab?	D	Yes
Acknowledgement of authors' contributions	D	Yes
<b>SAMPLE</b>		
Description	E	Yes
Volume/mass of sample processed	D	Yes
Microdissection or macrodissection	E	N/A
Processing procedure	E	Yes
If frozen - how and how quickly?	E	Yes
If fixed - with what, how quickly?	E	N/A
Sample storage conditions and duration (especially for FFPE samples)	E	Yes
<b>NUCLEIC ACID EXTRACTION</b>		
Procedure and/or instrumentation	E	Yes
Name of kit and details of any modifications	E	Yes
Source of additional reagents used	D	N/A
Details of DNase or RNase treatment	E	Yes
Contamination assessment (DNA or RNA)	E	N/A
Nucleic acid quantification	E	Yes
Instrument and method	E	Yes
Purity (A260/A280)	D	N/A
Yield	D	N/A
RNA integrity method/instrument	E	Yes
RIN/RQI or Cq of 3' and 5' transcripts	E	N/A
Electrophoresis traces	D	Yes
Inhibition testing (Cq dilutions, spike or other)	E	N/A
<b>REVERSE TRANSCRIPTION</b>		
Complete reaction conditions	E	Yes
Amount of RNA and reaction volume	E	Yes
Priming oligonucleotide (if using GSP) and concentration	E	N/A
Reverse transcriptase and concentration	E	Yes
Temperature and time	E	Yes
Manufacturer of reagents and catalogue numbers	D	N/A
Cqs with and without RT	D*	N/A
Storage conditions of cDNA	D	Yes
<b>qPCR TARGET INFORMATION</b>		
If multiplex, efficiency and LOD of each assay.	E	N/A
Sequence accession number	E	Yes
Location of amplicon	D	N/A
Amplicon length	E	Yes
<i>In silico</i> specificity screen (BLAST, etc) Pseudogenes, retropseudogenes or other homologs?	E	N/A
Sequence alignment	D	N/A
Secondary structure analysis of amplicon	D	Yes
Location of each primer by exon or intron (if applicable)	E	N/A
What splice variants are targeted?	E	N/A
<b>qPCR OLIGONUCLEOTIDES</b>		
Primer sequences	E	Yes

RTPrimerDB Identification Number	D	N/A
Probe sequences	D**	N/A
Location and identity of any modifications	E	N/A
Manufacturer of oligonucleotides	D	N/A
Purification method	D	N/A
<b>qPCR PROTOCOL</b>		
Complete reaction conditions	E	Yes
Reaction volume and amount of cDNA/DNA	E	Yes
Primer, (probe), Mg <sup>++</sup> and dNTP concentrations	E	Yes
Polymerase identity and concentration	E	Yes
Buffer/kit identity and manufacturer	E	Yes
Exact chemical constitution of the buffer	D	N/A
Additives (SYBR Green I, DMSO, etc.)	E	Yes
Manufacturer of plates/tubes and catalog number	D	N/A
Complete thermocycling parameters	E	Yes
Reaction setup (manual/robotic)	D	N/A
Manufacturer of qPCR instrument	E	Yes
<b>qPCR VALIDATION</b>		
Evidence of optimisation (from gradients)	D	N/A
Specificity (gel, sequence, melt, or digest)	E	Yes
For SYBR Green I, C <sub>q</sub> of the NTC	E	Yes
Standard curves with slope and y-intercept	E	Yes
PCR efficiency calculated from slope	E	Yes
Confidence interval for PCR efficiency or standard error	D	N/A
r <sup>2</sup> of standard curve	E	Yes
Linear dynamic range	E	Yes
C <sub>q</sub> variation at lower limit	E	N/A
Confidence intervals throughout range	D	N/A
Evidence for limit of detection	E	N/A
If multiplex, efficiency and LOD of each assay.	E	Yes
<b>DATA ANALYSIS</b>		
qPCR analysis program (source, version)	E	Yes
C <sub>q</sub> method determination	E	Yes
Outlier identification and disposition	E	Yes
Results of NTCs	E	Yes
Justification of number and choice of reference genes	E	Yes
Description of normalisation method	E	Yes
Number and concordance of biological replicates	D	Yes
Number and stage (RT or qPCR) of technical replicates	E	Yes
Repeatability (intra-assay variation)	E	N/A
Reproducibility (inter-assay variation, %CV)	D	N/A
Power analysis	D	N/A
Statistical methods for result significance	E	Yes
Software (source, version)	E	Yes
C <sub>q</sub> or raw data submission using RDML	D	N/A