

Table S1 Numbers of expansin genes in 5 plant species

Species	EXPA	EXPB	EXPLA	EXPLB	Total	Reference
<i>Arabidopsis thaliana</i>	26	6	3	1	36	[23]
<i>Fragaria vesca</i>	27	5	1	2	35	[25]
<i>Rubus chingii</i>	27	3	1	2	33	Table 1
<i>Rubus idaeus</i>	28	3	1	2	34	Table S2
<i>Rubus occidentalis</i>	27	3	1	2	33	Table S2

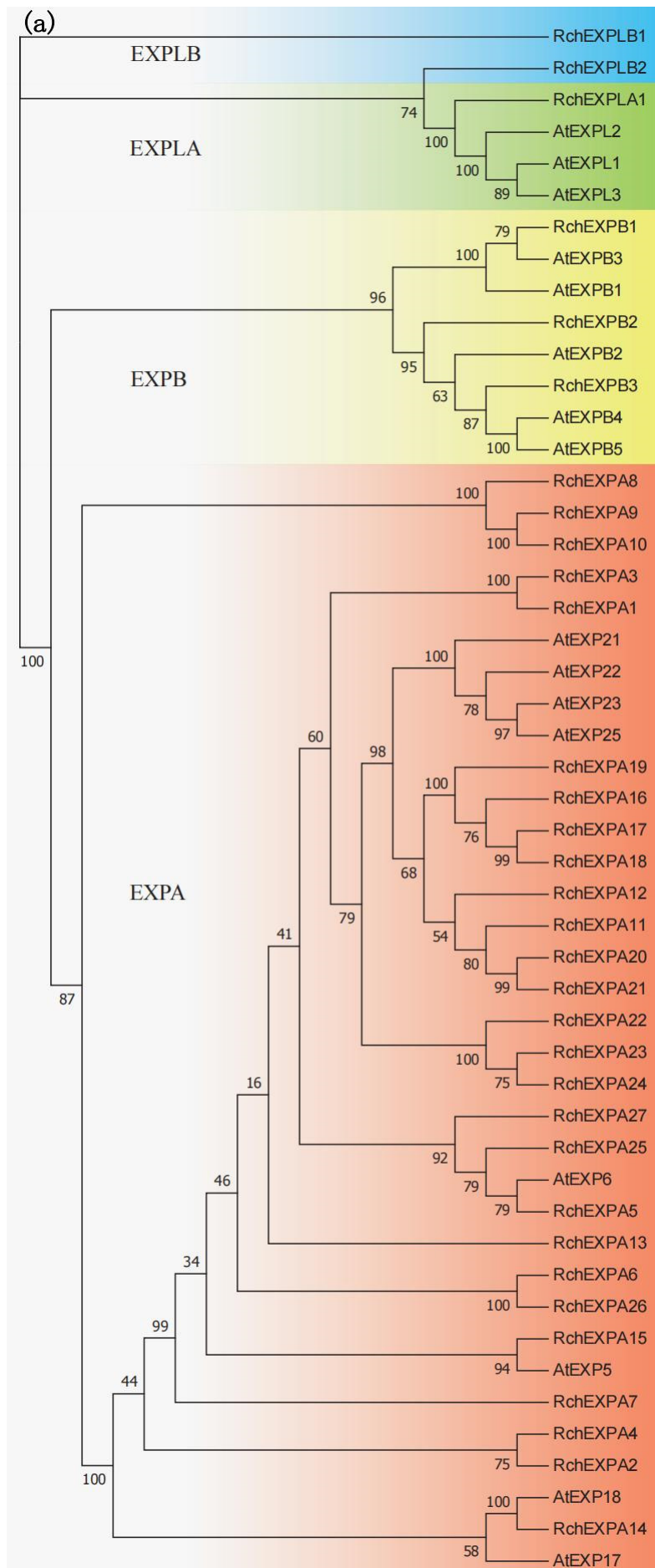
Table S2 EXPs in *Rubus idaeus* and *Rubus occidentalis*

Gene ID	Name	Gene ID	Name
Rid.01g009060.m1	RiEXPA1	Ro01_G15922	RoEXPA1
Rid.02g041350.m1	RiEXPA2	Ro02_G02205	RoEXPA2
Rid.02g061740.m1	RiEXPLA1	Ro02_G15121	RoEXPA3
Rid.02g062800.m1	RiEXPA3	Ro02_G36059	RoEXPA4
Rid.02g084440.m1	RiEXPA4	Ro02_G18395	RoEXPLA1
Rid.03g110390.m1	RiEXPA5	Ro03_G08117	RoEXPA5
Rid.03g135100.m1	RiEXPA6	Ro03_G10614	RoEXPA6
Rid.03g139440.m1	RiEXPA7	Ro03_G12857	RoEXPA7
Rid.04g151750.m1	RiEXPA8	Ro03_G16418	RoEXPA8
Rid.04g176200.m1	RiEXPA9	Ro03_G32019	RoEXPA9
Rid.04g186810.m1	RiEXPA10	Ro04_G00051	RoEXPA10
Rid.04g186820.m1	RiEXPA11	Ro04_G21075	RoEXPA11
Rid.04g186830.m1	RiEXPA12	Ro04_G26476	RoEXPA12
Rid.05g215930.m1	RiEXPLB1	Ro04_G26477	RoEXPA13
Rid.05g217190.m1	RiEXPLB2	Ro04_G26480	RoEXPA14
Rid.05g220540.m1	RiEXPA13	Ro04_G27793	RoEXPA15
Rid.05g233440.m1	RiEXPA14	Ro05_G03265	RoEXPA16
Rid.05g235520.m1	RiEXPA15	Ro05_G14880	RoEXPA17
Rid.06g246900.m1	RiEXPA16	Ro05_G30510	RoEXPA18
Rid.06g250640.m1	RiEXPA17	Ro06_G05709	RoEXPA19
Rid.06g254050.m1	RiEXPA18	Ro05_G07225	RoEXPLB1
Rid.06g254060.m1	RiEXPA19	Ro06_G06114	RoEXPA20
Rid.06g254070.m1	RiEXPA20	Ro05_G21133	RoEXPLB2
Rid.06g265530.m1	RiEXPB1	Ro06_G17613	RoEXPA21
Rid.06g276990.m1	RiEXPA21	Ro06_G22018	RoEXPA22
Rid.06g277000.m1	RiEXPA22	Ro06_G28417	RoEXPA23
Rid.06g291400.m1	RiEXPA23	Ro06_G28418	RoEXPA24
Rid.06g291410.m1	RiEXPA24	Ro06_G20508	RoEXPB1

Rid.06g291420.m1	RiEXPA25	Ro06_G28680	RoEXPA25
Rid.06g292330.m1	RiEXPA26	Ro07_G19428	RoEXPA26
Rid.07g304890.m1	RiEXPB2	Ro07_G34601	RoEXPA27
Rid.07g306320.m1	RiEXPA27	Ro07_G12284	RoEXPB2
Rid.07g309410.m1	RiEXPA28	Ro07_G17391	RoEXPB3
Rid.07g335310.m1	RiEXPB3		

Table S3 Syntenic *EXP* gene pairs between *R. chingii* and *F. vesca*.

Gene name	Gene ID	link	Gene ID	Gene name
FvEXPA5	FvH4_2g38040.t1	—	LG02.327	RchEXPA2
FvEXPA4	FvH4_2g17030.t1	—	LG02.2248	RchEXPA3
FvEXLA1	FvH4_2g16110.t1	—	LG02.2351	RchEXPLA1
FvEXPA7	FvH4_3g20110.t1	—	LG03.2086	RchEXPA4
FvEXPA9	FvH4_3g36410.t1	—	LG03.4509	RchEXPA5
FvEXPA16	FvH4_6g13610.t1	—	LG03.4509	RchEXPA5
FvEXPA26	FvH4_7g22700.t1	—	LG03.4509	RchEXPA5
FvEXPA10	FvH4_3g40360.t1	—	LG03.4886	RchEXPA6
FvEXPA15	FvH4_6g10010.t1	—	LG03.4886	RchEXPA6
FvEXPA27	FvH4_7g25860.t1	—	LG03.4886	RchEXPA6
FvEXPA12	FvH4_4g31140.t1	—	LG04.560	RchEXPA7
FvEXPA13	FvH4_5g14760.t2	—	LG04.560	RchEXPA7
FvEXPA25	FvH4_6g48210.t3	—	LG04.560	RchEXPA7
FvEXPA14	FvH4_5g17040.t1	—	LG05.148	RchEXPA12
FvEXPA12	FvH4_4g31140.t1	—	LG05.336	RchEXPA13
FvEXPA13	FvH4_5g14760.t2	—	LG05.336	RchEXPA13
FvEXPA25	FvH4_6g48210.t3	—	LG05.336	RchEXPA13
FvEXPLB1	FvH4_5g20290.t1	—	LG05.1739	RchEXPLB1
FvEXPLB2	FvH4_5g21120.t1	—	LG05.1872	RchEXPLB2
FvEXPA12	FvH4_4g31140.t1	—	LG06.511	RchEXPA15
FvEXPA13	FvH4_5g14760.t2	—	LG06.511	RchEXPA15
FvEXPA25	FvH4_6g48210.t3	—	LG06.511	RchEXPA15
FvEXPA20	FvH4_6g33460.t1	—	LG06.1815	RchEXPA20
FvEXPA17	FvH4_6g16910.t1	—	LG06.4033	RchEXPA22
FvEXPA16	FvH4_6g13610.t1	—	LG06.4347	RchEXPA25
FvEXPA26	FvH4_7g22700.t1	—	LG06.4347	RchEXPA25
FvEXPB2	FvH4_6g26120.t1	—	LG06.2871	RchEXPB1
FvEXPA10	FvH4_3g40360.t1	—	LG07.721	RchEXPA26
FvEXPA15	FvH4_6g10010.t1	—	LG07.721	RchEXPA26
FvEXPA27	FvH4_7g25860.t1	—	LG07.721	RchEXPA26
FvEXPA26	FvH4_7g22700.t1	—	LG07.1027	RchEXPA27
FvEXPB4	FvH4_7g27130.t1	—	LG07.600	RchEXPB2
FvEXPB3	FvH4_7g10960.t1	—	LG07.3409	RchEXPB3



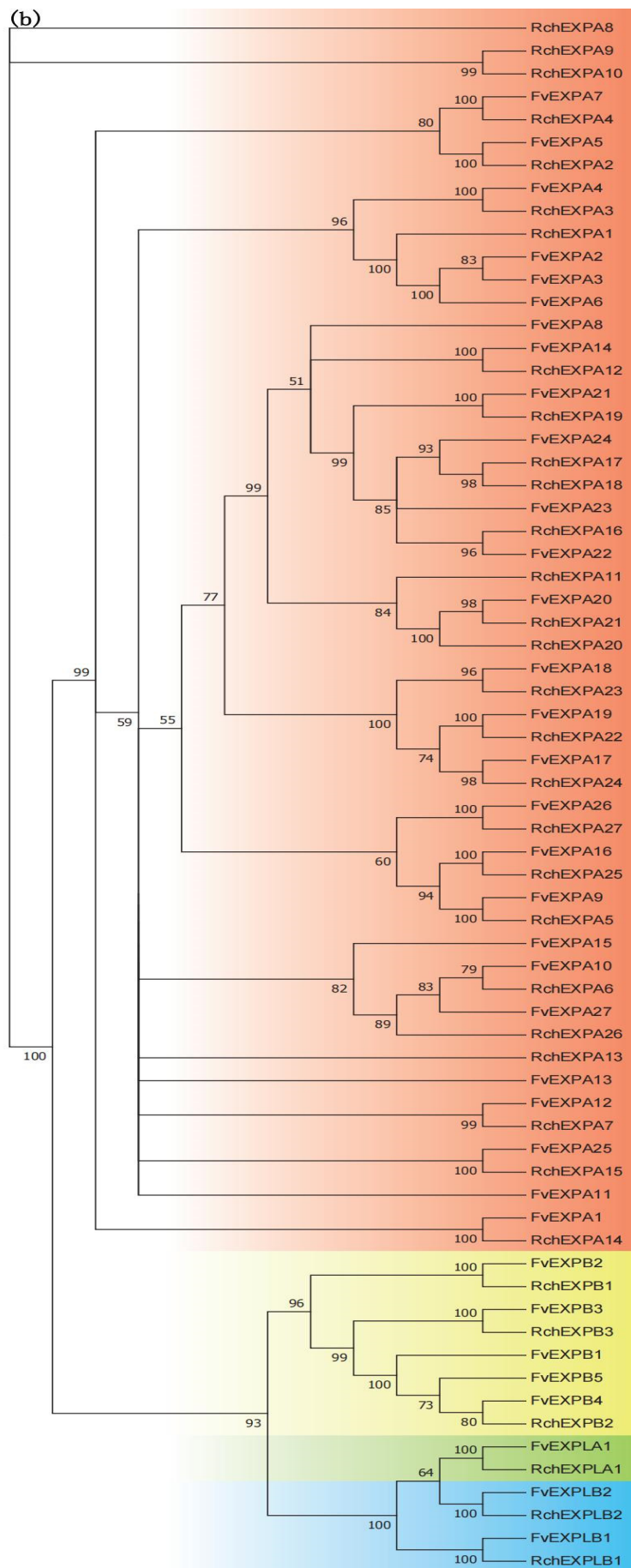


Figure S1 Phylogenetic analyses of expansins. (a) expansins of *Rubus chingii* and *Arabidopsis thaliana*; (b) expansins of *Rubus chingii* and *Fragaria vesca*