SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION – TABLE S1. Primer information used for genes expression levels quantification in rough skin pear fruits.

No	Gene ID	Primer name	Primer sequence	Product length (bp)
1	LOC103959908	59908-F	TGCTCAACTTGGCAACAGATGGTC	145
		59908-R	AGCAATTGGTTTGTGGGTGAGAGG	
2	LOC103959844	59844-F	GCCTCTCCACAAACAGGTCATCAC	147
		59844-R	GCAGGTTGATTGCTTGCTTCACTG	
3	LOC103961970	61970-F	GTCAGCTGAGCCAAACCCTA	109
		61970-R	TGACGAGGTCGAAAAGTCCC	
4	LOC103946882	46882-F	GCAGTGTCACAATGCACCAAGATC	139
		46882-R	CCTTCCTGATCCACCTCCTCCTC	
5	LOC103954864	54864-F	AATGGACAAGGCTGTTGGAGTGAC	113
		54864-R	GCACCACGCTTGAGGTCAGG	
6	LOC103963418	63418-F	TTGCCGGGAAGAACTGACAATGAG	121
		63418-R	GGGTGGTGACTTGTTTGTGGAGAG	
7	LOC103957898	57898-F	TTCCCTGTGGCGGTGTAATTGATC	132
		57898-R	CTCGTGGGCAACCTGTACTCTTTG	
8	LOC103959431	59431-F	CATGCTGAACTTGGCAACAGATGG	144
		59431-R	AATTGGTTTGTGGGTGAGGGGATC	
9	LOC103933820	33820-F	CGCAGGTGTAAGGTCTGTCCAAAC	130
		33820-R	AGGGAGGAGCCGAGCTAGAGAG	
10	LOC103945688	45688-F	TGGTAGCGTTGGTGAGCCTAATTG	94
		45688-R	TGTCACAACACGGTTGCCTTCC	

SUPPLEMENTAL INFORMATION – TABLE S2. MYB family genes and transcripts in *P. bretschneideri*

Gene ID	Transcript ID
LOC103926593	rna34602
LOC103926634	rna34654
LOC103926939	rna35040
LOC103926983	rna35050
LOC103927194	rna35309
LOC103927277	rna35403
LOC103927483	rna35632
LOC103927485	rna35633
LOC103927530	rna35631
LOC103928264	rna36527
LOC103928477	rna36768
LOC103928619	rna36923
LOC103929550	rna3830
LOC103929632	rna38183
LOC103929640	rna38192
LOC103929840	rna3869
LOC103930402	rna39026
LOC103930480	rna39184
LOC103930704	rna39445
LOC103931043	rna39839
LOC103931258	rna40101
LOC103931267	rna4065
LOC103931389	rna40270
LOC103931391	rna40272
LOC103931820	rna40750
LOC103931986	rna40938
LOC103932183	rna41150
LOC103932362	rna41340
LOC103932535	rna41605
LOC103932537	rna41608
LOC103932572	rna41611
LOC103932780	rna41845
LOC103933079	rna42192
LOC103933618	rna42786
LOC103933651	rna42822
LOC103933770	rna42925
LOC103933794	rna42960
LOC103933820	rna42982
LOC103934179	rna43408
LOC103934194	rna43430
LOC103935651	rna45027
LOC103935652	rna45028
LOC103935815	rna45221
LOC103935943	rna45376
LOC103936209	rna4602
LOC103936893	rna46457
LOC103936957	rna46532
LOC103936966	rna46531

LOC103937246	rna46868
LOC103937482	rna47131
LOC103937520	rna47167
LOC103937539	rna4706
LOC103937552	rna47201
LOC103938122	rna47831
LOC103938545	rna4865
LOC103938690	rna48465
LOC103938915	rna4916
LOC103939242	rna49076
LOC103939415	rna49293
LOC103939446	rna5000
LOC103939452	rna5001
LOC103939627	rna49527
LOC103939715	rna49633
LOC103939879	rna49805
LOC103939891	rna49821
LOC103940398	rna50371
LOC103940408	rna50388
LOC103940825	rna50872
LOC103941808	rna51923
LOC103941953	rna5240
LOC103942001	rna5249
LOC103942517	rna5320
LOC103942674	rna5342
LOC103942970	rna5241
LOC103943231	rna5688
LOC103943490	rna5730
LOC103943939	rna6517
LOC103944337	rna6961
LOC103944440	rna6975
LOC103944470	rna7117
LOC103944477	rna7123
LOC103944625	rna7219
LOC103945316	rna8097
LOC103945688	rna8513
LOC103945691	rna8518
LOC103945877	rna8690
LOC103946050	rna8925
LOC103946169	rna9080
LOC103946534	rna9474
LOC103946882	rna9979
LOC103947119	rna10261
LOC103947194	rna10306
LOC103947705	rna10906
LOC103947724	rna1183
LOC103948474	rna1289
LOC103948645	rna11962
LOC103948711	rna11957
LOC103948953	rna12356
LOC103949354	rna12772
LOC103949458	rna12897

LOC103950588	rna14182
LOC103950589	rna14183
LOC103950593	rna14187
LOC103950596	rna1439
LOC103950641	rna14239
LOC103950808	rna14404
LOC103951046	rna14701
LOC103951125	rna14771
LOC103951652	rna1574
LOC103951742	rna1586
LOC103951921	rna15760
LOC103951957	rna15756
LOC103952062	rna15899
LOC103952399	rna16340
LOC103952446	rna16342
LOC103952575	rna16513
LOC103952719	rna1732
LOC103952728	rna1733
LOC103952765	rna1737
LOC103952841	rna16747
LOC103952966	rna16990
LOC103953029	rna17083
LOC103953031	rna17085
LOC103953052	rna17050
LOC103953105	rna17158
LOC103953263	rna17346
LOC103953353	rna17398
LOC103953387	rna17468
LOC103953418	rna17439
LOC103953419	rna17449
LOC103953426	rna17466
LOC103953530	rna17645
LOC103953549	rna17644
LOC103953916	rna18071
LOC103954053	rna18247
LOC103954361	rna18546
LOC103954864	rna19107
LOC103955301	rna19595
LOC103955839	rna20165
LOC103956865	rna21416
LOC103957053	rna21643
LOC103957239	rna2247
LOC103957479	rna22168
LOC103957761	rna22512
LOC103957898	rna22718
LOC103958062	rna22908
LOC103958466	rna2359
LOC103958718	rna23654
LOC103958786	rna23747
LOC103958890	rna23843
LOC103959332	rna24313
LOC103959431	rna24427

LOC103959465	rna24472
LOC103959467	rna24473
LOC103959532	rna24556
LOC103959580	rna24599
LOC103959683	rna24714
LOC103959844	rna24918
LOC103959908	rna24979
LOC103960041	rna25146
LOC103960282	rna25442
LOC103960468	rna25656
LOC103960556	rna25783
LOC103960944	rna26207
LOC103961025	rna26281
LOC103961264	rna26553
LOC103961513	rna26804
LOC103961516	rna26808
LOC103961604	rna26929
LOC103961970	rna27419
LOC103962048	rna344
LOC103962397	rna27903
LOC103962772	rna28304
LOC103963221	rna28843
LOC103963267	rna28828
LOC103963302	rna356
LOC103963418	rna29096
LOC103963897	rna29645
LOC103963966	rna29724
LOC103964234	rna30026
LOC103964569	rna3106
LOC103964977	rna30889
LOC103965000	rna30914
LOC103965544	rna31565
LOC103965608	rna31631
LOC103965615	rna31638
LOC103965672	rna31685
LOC103965697	rna31723
LOC103965839	rna31889
LOC103965956	rna31991
LOC103965960	rna32006
LOC103966637	rna32776
LOC103967156	rna33394

SUPPLEMENTAL INFORMATION – TABLE S3. MYB family genes and transcripts in *A. thaliana*

Gene ID	Gene name	Transcript ID
AT1G06180	MYB13	AT1G06180.1
AT1G08810	MYB60	AT1G08810.3
AT1G09540	MYB61	AT1G09540.1
AT1G09770	CDC5	AT1G09770.1
AT1G14350	MYB124	AT1G14350.4
AT1G16490	MYB58	AT1G16490.1
AT1G17950	MYB52	AT1G17950.1
AT1G18570	MYB51	AT1G18570.1
AT1G18710	MYB47	AT1G18710.1
AT1G22640	MYB3	AT1G22640.1
AT1G25340	MYB116	AT1G25340.3
AT1G26780	MYB117	AT1G26780.2
AT1G34670	MYB93	AT1G34670.1
AT1G35515	MYB8	AT1G35515.1
AT1G48000	MYB112	AT1G48000.1
AT1G56160	MYB72	AT1G56160.1
AT1G56650	MYB75	AT1G56650.1
AT1G57560	MYB50	AT1G57560.2
AT1G63910	MYB103	AT1G63910.1
AT1G66230	MYB20	AT1G66230.1
AT1G66370	MYB113	AT1G66370.1
AT1G66380	MYB114	AT1G66380.1
AT1G66390	MYB90	AT1G66390.1
AT1G68320	MYB62	AT1G68320.1
AT1G69560	MYB105	AT1G69560.2
AT1G73410	MYB54	AT1G73410.1
AT1G74080	MYB122	AT1G74080.1
AT1G74430	MYB95	AT1G74430.1
AT1G74650	ATY13	AT1G74650.2
AT1G79180	MYB63	AT1G79180.2
AT2G02820	MYB88	AT2G02820.2
AT2G16720	MYB7	AT2G16720.1
AT2G23290	MYB70	AT2G23290.1
AT2G25230	MYB100	AT2G25230.1
AT2G26950	MYB104	AT2G26950.1
AT2G26960	MYB81	AT2G26960.1
AT2G31180	MYB14	AT2G31180.1
AT2G32460	MYB101	AT2G32460.1
AT2G36890	RAX2	AT2G36890.2
AT2G37630	AS1	AT2G37630.1
AT2G38090	AT2G38090	AT2G38090.1
AT2G39880	MYB25	AT2G39880.1
AT2G47190	MYB2	AT2G47190.1
AT2G47460	MYB12	AT2G47460.1
AT3G01140	MYB106	AT3G01140.2
AT3G01530	MYB57	AT3G01530.1
AT3G02940	MYB107	AT3G02940.3
AT3G06490	MYB108	AT3G06490.1
AT3G08500	MYB83	AT3G08500.1

AT3G09230	MYB1	AT3G09230.1
AT3G09370	AT3G09370	AT3G09370.2
AT3G11280	AT3G11280	AT3G11280.1
AT3G11440	MYB65	AT3G11440.1
AT3G11450	AT3G11450	AT3G11450.1
AT3G12720	MYB67	AT3G12720.1
AT3G12820	MYB10	AT3G12820.2
AT3G13540	MYB5	AT3G13540.1
AT3G13890	MYB26	AT3G13890.2
AT3G18100	AT3G18100	AT3G18100.3
AT3G23250	MYB15	AT3G23250.1
AT3G24310	MYB305	AT3G24310.1
AT3G27785	MYB118	AT3G27785.1
AT3G27810	MYB21	AT3G27810.2
AT3G27920	GL1	AT3G27920.1
AT3G28470	MYB35	AT3G28470.1
AT3G28910	MYB30	AT3G28910.2
AT3G29020	MYB110	AT3G29020.2
AT3G30210	MYB121	AT3G30210.1
AT3G46130	MYB48	AT3G46130.4
AT3G47600	MYB94	AT3G47600.1
AT3G48920	MYB45	AT3G48920.1
AT3G49690	RAX3	AT3G49690.1
AT3G50060	MYB77	AT3G50060.1
AT3G52250	AT3G52250	AT3G52250.2
AT3G53200	MYB27	AT3G53200.1
AT3G55730	MYB109	AT3G55730.1
AT3G60460	DUO1	AT3G60460.1
AT3G61250	MYB17	AT3G61250.1
AT3G62610	MYB11	AT3G62610.1
AT4G00540	MYB3R2	AT4G00540.2
AT4G01680	MYB55	AT4G01680.2
AT4G05100	MYB74	AT4G05100.1
AT4G09460	MYB6	AT4G09460.1
AT4G12350	MYB42	AT4G12350.1
AT4G13480	MYB79	AT4G13480.1
AT4G17785	MYB39	AT4G17785.1
AT4G18770	MYB98	AT4G18770.1
AT4G21440	MYB102	AT4G21440.1
AT4G22680	MYB85	AT4G22680.1
AT4G25560	LAF1	AT4G25560.1
AT4G26930	MYB97	AT4G26930.1
AT4G28110	MYB41	AT4G28110.2
AT4G32730	MYB3R1	AT4G32730.5
AT4G33450	MYB69	AT4G33450.1
AT4G34990	MYB32	AT4G34990.1
AT4G37260	MYB73	AT4G37260.1
AT4G37780	MYB87	AT4G37780.1
AT4G38620	MYB4	AT4G38620.1
AT5G01200	AT5G01200	AT5G01200.1
AT5G02320	MYB3R5	AT5G02320.1
AT5G04760	AT5G04760	AT5G04760.1

AT5G05790	AT5G05790	AT5G05790.2
AT5G06100	MYB33	AT5G06100.5
AT5G07690	MYB29	AT5G07690.1
AT5G07700	MYB76	AT5G07700.1
AT5G08520	SRM1	AT5G08520.1
AT5G10280	MYB92	AT5G10280.1
AT5G11050	MYB64	AT5G11050.1
AT5G11510	MYB3R4	AT5G11510.3
AT5G12870	MYB46	AT5G12870.1
AT5G14340	MYB40	AT5G14340.1
AT5G14750	WER	AT5G14750.4
AT5G15310	MYB16	AT5G15310.3
AT5G16600	MYB43	AT5G16600.1
AT5G16770	MYB9	AT5G16770.1
AT5G17800	MYB56	AT5G17800.1
AT5G23000	RAX1	AT5G23000.1
AT5G23650	AT5G23650	AT5G23650.1
AT5G26660	MYB86	AT5G26660.1
AT5G35550	TT2	AT5G35550.1
AT5G39700	MYB89	AT5G39700.1
AT5G40330	MYB23	AT5G40330.1
AT5G40350	MYB24	AT5G40350.1
AT5G40360	MYB115	AT5G40360.1
AT5G40430	MYB22	AT5G40430.1
AT5G49330	MYB111	AT5G49330.1
AT5G49620	MYB78	AT5G49620.1
AT5G52260	MYB19	AT5G52260.1
AT5G52600	MYB82	AT5G52600.1
AT5G54230	MYB49	AT5G54230.1
AT5G55020	MYB120	AT5G55020.1
AT5G56110	MYB80	AT5G56110.1
AT5G57620	MYB36	AT5G57620.1
AT5G58850	MYB119	AT5G58850.1
AT5G59780	MYB59	AT5G59780.1
AT5G60890	MYB34	AT5G60890.1
AT5G61420	MYB28	AT5G61420.1
AT5G62320	MYB99	AT5G62320.1
AT5G62470	MYB96	AT5G62470.1
AT5G65230	MYB53	AT5G65230.1
AT5G65790	MYB68	AT5G65790.1
AT5G67300	MYB44	AT5G67300.1

SUPPLEMENTAL INFORMATION – TABLE S4. The structural features of motif 1–20.

Name	*E*-value	Sites	Width	Amino acid sequence
Motif 1	1.1E-2626	98	34	AGLQRCGKSCRLRWINYLRPDJKRGNFSEEEEZL
Motif 2	1.1E-2956	98	41	IIKLHSJLGNKWSKIASHLPGRTDNEIKNYWNTHJKKKLRK
Motif 3	1.0E-1542	93	28	GPWTPEEDEKLINYILTNGHGCWRSLPK
Motif 4	1.0E-372	61	11	MGRSPCCDKQG
Motif 5	2.50E-264	44	21	MGIDPVTHKPLTESESSSSNL
Motif 6	2.00E-106	10	29	TKGHWTPEEDEKLREAVERYGPKNWKAIA
Motif 7	4.20E-102	4	50	GYQPQQQFDPNIQQVQNFSINEAAAAQYNNIGNELMVPISVASSEPVAYE
Motif 8	3.50E-97	4	50	PTVPKFCEIIDGNVCRMPILYPSDLQELDSLAKLSCFTSGHGSHPQDLQF
Motif 9	1.70E-99	7	41	FSSDHIHNPSGHGSEEGFFTLNTNPNLISQPQDQLYLPIVP
Motif 10	3.10E-93	4	50	VVVGGVGDCYNFGENGVFGSGDVDIGVEGEIFVPPLESVSTEDQNIKTET
Motif 11	4.60E-89	4	50	ILTCNKNIKGESITGVGNYFDDDQEELTMGDWDLEDLMKDVSSSSFPYLD
Motif 12	4.00E-85	4	50	VPSLGLNYHGDFNNILKLDQTNYASNFVDHFLPPFQLPSNNASSYESSSW
Motif 13	4.80E-72	4	41	FMQSTILNHMFDPLPMLDINHGGLTFPGAGGYHNANPCITQ
Motif 14	1.30E-53	5	41	FLEDLTWDFSTSSEBGSADNPTEEBSLAWFMDCKDFGVQDF
Motif 15	1.40E-51	23	8	FFDFLGVG
Motif 16	1.20E-39	10	20	LQAEATQLAKLQLLQYLLQP
Motif 17	3.00E-34	4	50	FDDLEYFEFQPGFCSSQLDIDLPAAQYPVGNFRPYEQDNNFPFSHLPSLQ
Motif 18	1.80E-33	4	21	FPDRTDVQCLHRWQKVLNPEL
Motif 19	8.10E-28	2	50	YNYIGKYYSCNDRNYHQYRPAFTHDPRPPFPKEFYPNTCSVTMHQDHNKD
Motif 20	1.50E-23	3	41	SNQLECIDAIMSLLPSSSSSSSPSSASPSLLPLSSSQFDAN