

**An ancestral allele of grapevine transcription factor *MYB14*
promotes plant defence**

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Figure S1. The alignment and the significant differential *cis*-elements for the *MYB14* promoters of Hoe29 and Ke83, compared to Augster Weiss and the reference genome (from the *vinifera* cultivar Pinot Noir).

Hoe29	CTACTGACGTGCACTAGCCTCTTTCTTTGACCCCTTCACACCATCGATGCTAAATTCCAA	60
Ke83	CTACTGACGTGCACTAGCCTCTTTCTTTGACCCCTTCACACCATCGATGCTAAATTCCAA	60
Augster Weiss	CTACTGACGTGCACTAGCCTCTTTCTTTGACCCCTTCACACCATCGATGCTAAATTCCAA	60
Reference	CTACTGACGTGCACTAGCCTCTTTCTTTGACCCCTTCACACCATCGATGCTAAATTCCAA	60

Hoe29	GCAGCCAAATACTTCAACAAATGTGAAGTGCACGTGTACACTCTCACACTCGTGTCCAT	120
Ke83	GCAGCCAAATACTTCAACAAATGTGAAGTGCACGTGTACACTCTCACACTCGTGTCCAT	120
Augster Weiss	GCAGCCAAATACTTCAACAAATGTGAAGTGCACGTGTACACTCTCACACTCGTGTCCAT	120
Reference	GCAGCCAAATACTTCAACAAATGTGAAGTGCACGTGTACACTCTCACACTCGTGTCCAT	120

Hoe29	TTTGTGAATATGGTATTAGGTGTTGTTAGGGTCTAATTTTGGGTCGAGTTAAGAGAAC	180
Ke83	TTTGTGAATATGCTA TTAGGT TGTTAGGGTCTAATTTTGGGTCGAGTTAAGAGAAC	180
	<i>MRE</i>	
Augster Weiss	TTTGTGAATATGGTATTAGGTGTTGTTAGGGTCTAATTTTGGGTCGAGTTAAGAGAAC	180
Reference	TTTGTGAATATGGTATTAGGTGTTGTTAGGGTCTAATTTTGGGTCGAGTTAAGAGAAC	180

Hoe29	ACTTATTCATCATACTTTAGCTGGATATGGAAAGTTTTTGAATATGTAATGAAGAAAAGG	240
Ke83	ACTTATTCATCATACTTTAGCTGGATATGGAAAGTTTTTGAATATGTAATGAAGAAAAGG	240
Augster Weiss	ACTTATTCATCATACTTTAGCTGGATATGGAAAGTTTTTGAATATGTAATGAAGAAAAGG	240
Reference	ACTTATTCATCATACTTTAGCTGGATATGGAAAGTTTTTGAATATGTAATGAAGAAAAGG	240

Hoe29	AAAGAAATTTATTTCAAATTCATCCATTAGTATTTTATAAATTTATTTTATTATTATA	300
Ke83	AAAGAAATTTATTTCAAATTCATCCATTAGTATTTTATAAATTTATTTTATTATTATA	300
Augster Weiss	AAAGAAATTTATTTCAAATTCATCCATTAGTATTTTATAAATTTATTTT-----	291
Reference	AAAGAAATTTATTTCAAATTCATCCATTAGTATTTTATAAATTTATTTT-----	291

Hoe29	ATTTATTTTTTTAAAGAGATTTAAATGAAAATATTTTAAAGTAGAA-----TCC	349
Ke83	ATTTATTTTTTT-AAAGAGATTTAAATGAAAATATTTTAAAGTAGAA-----TCC	348
Augster Weiss	-----TTTAAAGAGATTTAAATGAAAATATTTTAAAGTAGAAGTGTTTAAAAATCC	341
Reference	-----TTTAAAGAGATTTAAATGAAAATATTTTAAAGTAGAAGTGTTTAAAAATCC	341
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Hoe29	TCTAATAATTAATTTTATTCTTTAAAAATTAATTTATATATATAAAATATATTTATA	409
Ke83	TCTAATAATTAATTTTATTCTTTAAAAATTAATTTATATATATAAAATATATTTATA	408
Augster Weiss	TCTAATAATTAATTTTATTCTTTAAAAATTAATTTATATATATAAAATATATTTATC	411
Reference	TCTAATAATTAATTTTATTCTTTAAAAATTAATTTATATATATAAAATATATTTATC	401

Hoe29	GGATGTAACCGATAAAATTTGAAATATGTGGCGACTTTATATATTTACATTCAGGTGATG	469
Ke83	GGATGTAACCGATAAAATTTGAAATATGTGGCGACTTTATATATTTACATTCAGGTGATG	468
Augster Weiss	GGATGTAACCGTAAATTTGAAATATGTGACGATTTTATATATTTACATTAGGGTGGTG	461
Reference	GGATGTAACCGTAAATTTGAAATATGTGACGATTTTATATATTTACATTAGGGTGGTG	461

Hoe29	TTTATTTTGCATGGAATAGAAAAA-TCAAAATATTTGATTTTTTTAATT CAATTAAA	528
	<i>CAAT-box</i>	
Ke83	TTTATTTTTCGAT-----	481
Augster Weiss	TTTATTTTGGATTGAATAGAAAAAATTAATTTGATTTTCT-AATTTAACTAAA	520
Reference	TTTATTTTGGATTGAATAGAAAAA-TCAAAATATTTGATTTTCT-AATTTAACTAAA	519

Hoe29	AATAACTCTT TGACATCGTTCAATATAACTAACTGAACAAATTTAATAGTTTATAGTT	588
	<i>3-AF1 binding site</i>	
Ke83	-----	
Augster Weiss	AATAACTTGTTCACATCGTTCAATATAACTAACTGAATTTAATTAATAGATTCAATT	580
Reference	AATAACTTGTTCACATCGTTCAATATAACTAACTGAATTTAATTAATAGATTCAATT	579

Hoe29 CAATTATGTTGAAAAATATAAACATGTTACTTTTAAATGAATAAAAAAATCAAAATATTT 648
CAAT-box CAAT-box CAAT-box

Ke83 -AATTATGTTGAAAAATATAAATATGTTACTTTTAACTGAATAAAAAAAGTCAAAATATTT 540
as-2-box CAAT-box

Augster Weiss TAGTTATATTGAAGAAATATAAACGGATTACTTTTAACTGAATATAAAAAATTAAGTATTT 640
Reference TAGTTATATTGAAGAAATATAAACGGATTACTTTTAACTGAATATAAAAAATTAAGTATTT 639
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Hoe29 TAATTTTTTATATTCAATACAAAAACAACACCATTACATCTCAAGATTATCAATGAAA 708
circadian

Ke83 TAATTTTTTATATTCAATACAAAAACAACATCATTTACAACCAAGATTATCAATGAAA 600
circadian

Augster Weiss TAATTTTCATATTCAATAAAAAACAACATCACTTAAGATTCA-GATTATCAATGAAA 699
Reference TAATTTTCATATTCAATAAAAAACAACATCACTTAAGATTCA-TATTATCAATGAAA 698
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Hoe29 AACTCAAATTAATAATTTCTGCATATATTCTAATGCACCGCCTTAAGATGAGCCGGTT 768
Ke83 AACTCAAATTAATAATTTCTGCATATATTCTAAAGCACCAGCCTTAAGATGAGCCGGTT 660
Augster Weiss AACTCAAATTAATAATTTCTGCATATATTCTAAGCACCAGCCTTAAGATGAGCCGGTT 759
Reference AACTCAAATTAATAATTTCTGCATATATTCTAAGCACCAGCCTTAAGATGAGCCGGTT 758
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Hoe29 ATTCTATTAAGAGATAATAACGAATTTGAAAAGGCAGAAAAGGAAAATACCAAGAAGGA 828
Ke83 ATTCTATTAAGAGATAATAACGAATTTGAAAAGGCAGAAAAGGAAAATACCAAGAAGGA 720
Augster Weiss ATTCTATTAAGAGATAATAACGAATTTGAAAAGGCAGAAAAGGAAAATACCAAGAAGGA 819
Reference ATTCTATTAAGAGATAATAACGAATTTGAAAAGGCAGAAAAGGAAAATACCAAGAAGGA 818
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Hoe29 CTTGGGGATATTGAACGTCACATTCATAGGGATCGCCTTGCAGAAGAAAACAAAAACAAG 888
Ke83 ATTGGGGATATTGAACGTCACATTCATAGGGATCGCCTTGCAGAAGAAAACAAAAACAAG 780
Augster Weiss TTTGGGGATATTGAACGTCACATTCATAGGGATCACCTTGCAGAAGAAAACAAAAACAAG 879
Reference TTTGGGGATATTGAACGTCACATTCATAGGGATCACCTTGCAGAAGAAAACAAAAACAAG 878
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Hoe29 ATGAAATTCATCCGGGTAAGTTATTATATAGCAAGTTGGTGCCTTAATTTGCCAAAGTT 948
Ke83 ATGAAATTCATCCGGGTAAGTTATTATATAGCAAGTTGGTGCCTTAATTTGCCAAAGTT 840
Augster Weiss ATGAAATTCATCCGGGTAAGTTATTATATAGCAAGTTGGTGCCTTAATTTGCCAAAGTT 939
Reference ATGAAATTCATCCGGGTAAGTTATTATATAGCAAGTTGGTGCCTTAATTTGCCAAAGTT 938
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Hoe29 GGTCACAAGTTTCATTAATAATAATAATAATAATAATAATAAGGAAAGAAAGGAAA 1008
Ke83 GGTCACAAGTTTTATTAAAATAATAATAATAATAATA-----GGAAAGAAAGGAAA 894
Augster Weiss GGTCACAAGTTTCATTAATAATAATAATAATAATAATA-----GGAAAGAAAGGAAA 993
Reference GGTCACAAGTTTCATTAATAATAATAATAATAATAATA-----GGAAAGAAAGGAAA 992
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Hoe29 AGAAAAATCTTGAACCTCAAATGTAATAATCTGAACATGCCCAATTAATGGCCATGCT 1068
Ke83 AGAAAAATCTTGAACCTCAAATGTAATAATCTGAACATGCCCAATTAATGGCCATG-T 953
Augster Weiss AGAAAAATCTTGAACCTCAAATGTAATAATCTGAACATGCCCAATTAATGGCCATGCT 1053
Reference AGAAAAATCTTGAACCTCAAATGTAATAATCTGAACATGCCCAATTAATGGCCATGCT 1052
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Hoe29 AGTTCAAGGAAAAGAAAACCCACGTTTTATTGACCAATAAACAAACACTCGTGTGCAT 1128
Ke83 AGTTCAAGGAAAAGAAAACCCACGTTTTATTGACCAATAAACAAACACTCGTGTGCAT 1013
Augster Weiss AGTTCAAGGAAAAGAAAACCCACGTTTTATTGACCAATAAACAAACACTCGTGTGCAT 1113
Reference AGTTCAAGGAAAAGAAAACCCACGTTTTATTGACCAATAAACAAACACTCGTGTGCAT 1112
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Hoe29 CCAGTGAGGCGGTTCCCTAGCAATTGTGGGCTAAAAAGGATATGCCTTTTTATTTCCTTTT 1188
Ke83 CCAGTGAGGCGGTTCCCTAGCAATTGTGGGCTAAAAAGGATATGCCTTTTTATTTCCTTTT 1073
Augster Weiss CCAGTGAGGCGGTTCCCTAGCAATTGTGGGCTAAAAAGGATATGCCTTTTTATTTCCTTTT 1173
Reference CCAGTGAGGCGGTTCCCTAGCAATTGTGGGCTAAAAAGGATATGCCTTTTTATTTCCTTTT 1172
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Hoe29 TTTCTTCTTTTCTTAAATCTATCAACAGTTGTTTGCCTATCTGCAAATGCAGCAG 1248
5'UTR Py-rich stretch GATA-motif

Ke83 TTT-----TCTAAATCTATCAACAGTTGTTTGTACTATCTGCAAATGCAGCAG 1123
Augster Weiss TTT-----TCTAAATCTATCAACAGTTGTTTGTACTATCTGCAAATGCAGCAG 1223

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Reference      TTT-----TCTAAATCTATCAACAGTTGTTTGTACTATCTGCAAATGCAGCAG 1222
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Hoe29          CTGGACTCCTCATTATAAATACCCGCTCATGGGCTTCAAATCGGTTTGAGCTTGGGACAT 1308
Ke83           CTGGACAGC--ACTATAAATACCCGCTCATGGGCTTCAAATCGGTTTGAGCTTGGGACAT 1181
Augster Weiss  CTGGACTCCTCATTATAAATACCCGCTCATGGGCTTCAAATCGGTTTGAGCTTGGGACAT 1283
Reference      CTGGACTCCTCATTATAAATACCCGCTCATGGGCTTCAAATCGGTTTGAGCTTGGGACAT 1282
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Hoe29          CGACAGAGAACACAG-----TCTCAAATCCTTACATAGAGAAGA 1347
                TCA-element

Ke83           CAAGAGAGACCACAGAGATAAACCAAGGGTGTCTCAGTCTCAAATCCTTACATAGAAAAGA 1241
Augster Weiss  CAAGAGAGAACACAGAGATAAACCAAGGGTGTCTCAGTCTCAAATCCTTACGTAGAAAAGA 1343
Reference      CAAGAGAGAACACAGAGATAAACCAAGGGTGTCTCAGTCTCAAATCCTTACGTAGAAAAGA 1342
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Hoe29          AAAA 1351
Ke83           AAAA 1245
Augster Weiss  AAAA 1347
Reference      AAAA 1346
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CAAT box: common *cis*-acting element in promoter and enhancer regions.

circadian: *cis*-acting regulatory element involved in circadian control.

Ke83

MRE: *MYB* binding site involved in light responsiveness.

as-2-box: involved in shoot-specific expression and light responsiveness.

Hoe29

3-AF1 binding site: light responsive element.

5'UTR Py-rich stretch: *cis*-acting element conferring high transcription levels.

GATA-motif: part of a light responsive element.

TCA-element: *cis*-acting element involved in salicylic acid responsiveness.

Table S1. Sequence of oligonucleotide primers for GATEWAY® cloning of the *MYB14* constructs for the promoter-reporter assay.

Name	Primer sequence 5'-3'
Promoter of Hoe29	Sense: 5' - 3' GGGGACAAGTTTGTACAAAAAAGCAGGCTTCCTACTGACGTGCACTAGCCT Antisense: 5' - 3' GGGGACCACTTTGTACAAGAAAGCTGGGTCTTTTCTTCTCTATGTAAGGATTGA
Promoter of Ke83	Sense: 5' - 3' GGGGACAAGTTTGTACAAAAAAGCAGGCTTCCTACTGACGTGCACTAGCCT Antisense: 5' - 3' GGGGACCACTTTGTACAAGAAAGCTGGGTCTTTGAGACTGAGACACCCTTG
Promoter of Augster Weiss	Sense: 5' - 3' GGGGACAAGTTTGTACAAAAAAGCAGGCTTCCTACTGACGTGCACTAGCCT Antisense: 5' - 3' GGGGACCACTTTGTACAAGAAAGCTGGGTCTTTGAGACTGAGACACCCTTG