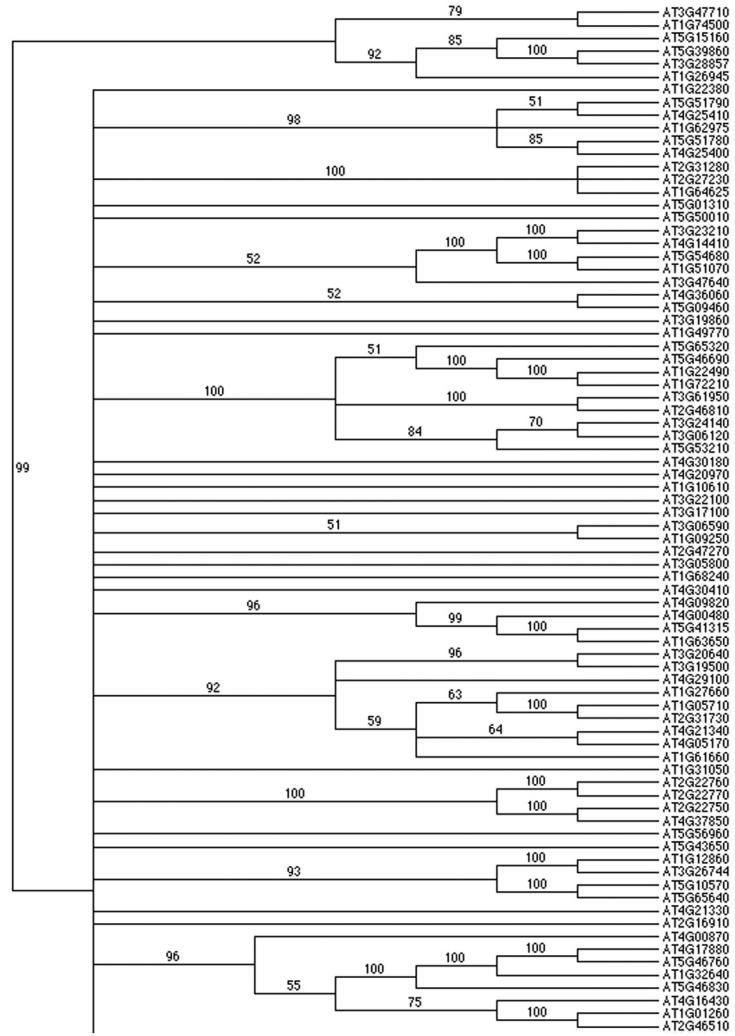
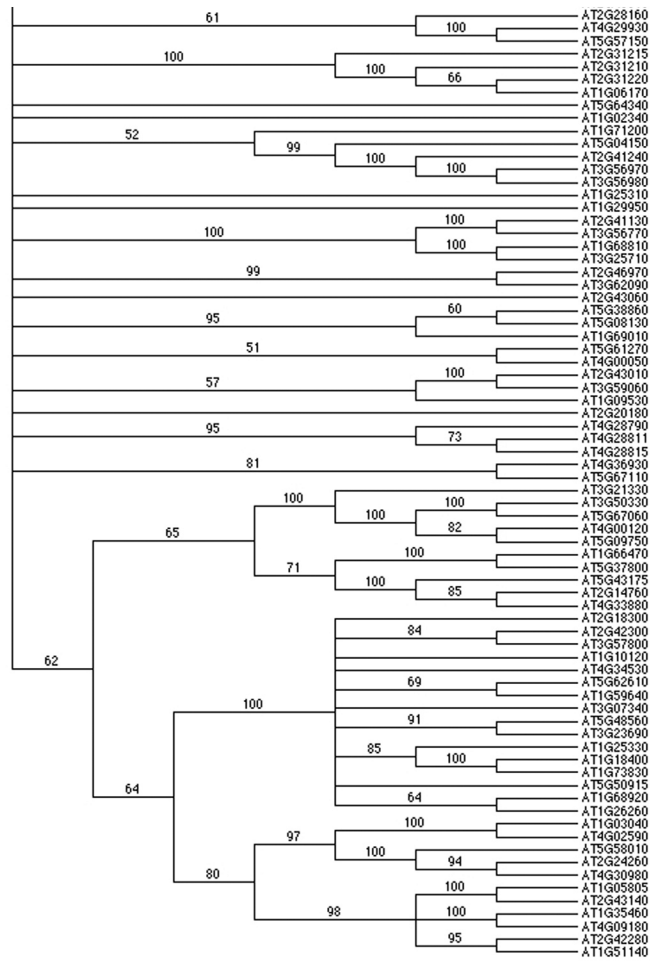
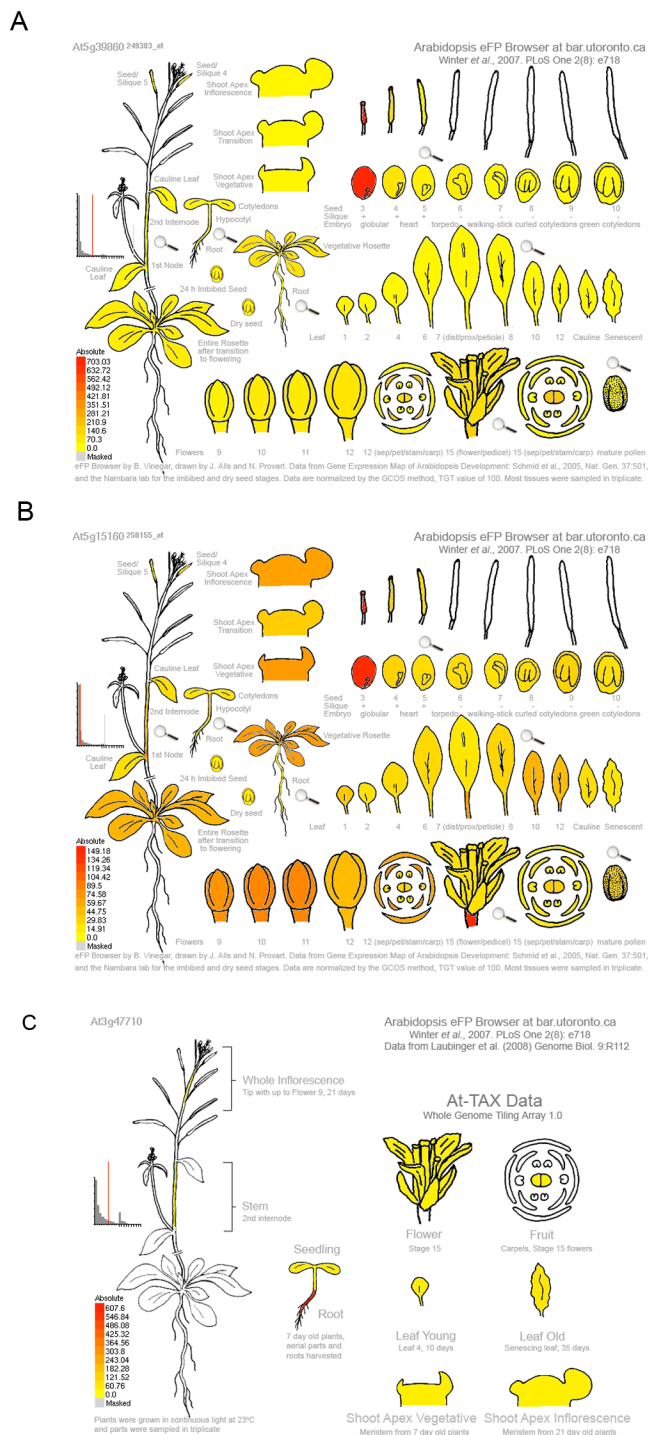


Supplemental Data. Mara et al. Plant Cell. (2010). 10.1105/tpc.109.065946

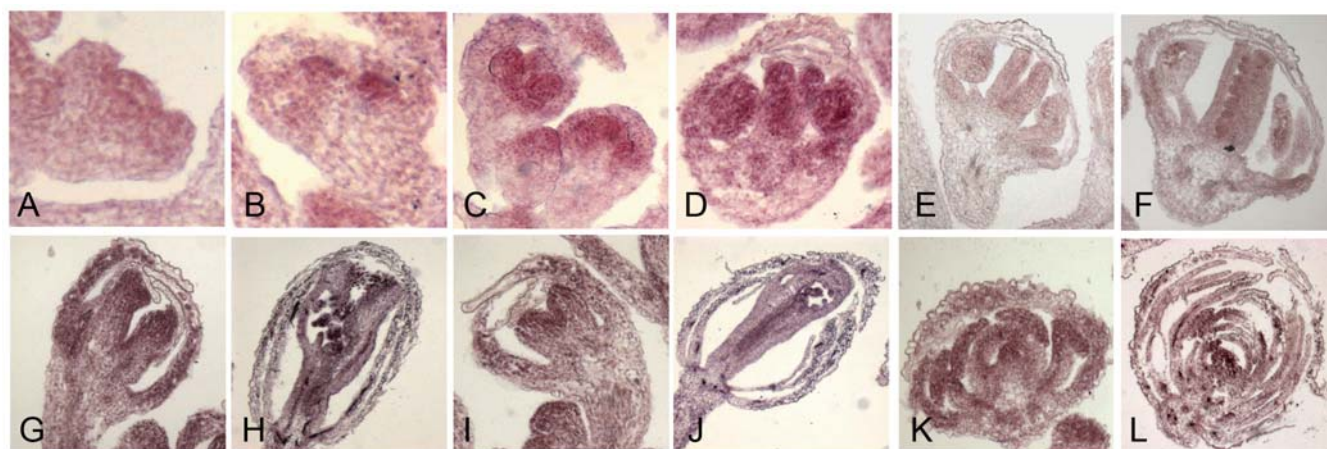




Supplemental Figure 1. Neighbor joining analysis of 154 Arabidopsis bHLH genes. Clade containing bHLH genes described in this paper is shown with a vertical line. Bootstrap values of >50% are shown.

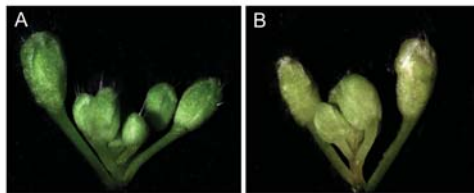


Supplemental Figure 2. Digital expression profiling of BNQ1 (At5g39860), BNQ2 (At5g15160) and BNQ3 (At3g47710).



Supplemental Figure 3. In situ expression analyses of BNQ2.

Expression in stage 4 (A), stage 5 (B), stages 4-6 (C), stage 7 (D), stage 8 (E) and late stage (F) WT flowers. Expression in early (G) and late (H) *ap3-3* mutant flowers, in early (I) and late stage (J) *pi-1* mutant flowers, and in early (K) and late stage (L) *ag-1* mutant flowers.



Supplemental Figure 4. Complementation analysis of *bnq3*.

Flower buds of *bnq3* homozygous plants transformed with *35S:BNQ3* (A) or *p235* (empty vector) (B). Transgenic plants containing *35S:BNQ3* produce normal flowers with green sepals, indicating that the transgene can complement the pale phenotype of *bnq3*; the empty vector control does not show a similar rescue.

Supplemental Table 1.

RT-PCR primer sequences.

<i>BNQ1 F</i>	5'-GGCAATCTTCAAGTGCTCCAAG-3'
<i>BNQ1 R</i>	5'-TTCTAATAACGGCGGCTTCAGGGC-3'
<i>BNQ2 F</i>	5'-ATGTCTTCTAGCAGAAGGTTCGAGACAAGCAAGCTCA-3'
<i>BNQ2 R</i>	5'-TTATCCATTAATCAAGCTCCTAATAACTGCGGCTTGTGG-3'
<i>BNQ3 F</i>	5'-ATGTCTAGCAGAAAATCACGTT-3'
<i>BNQ3 R</i>	5'-CTACTGCATAAGCAAACCTTCG-3'
<i>At3g28857 F</i>	5'-AAAACAAGAAAATGTCTAACAGAAGA-3'
<i>At3g28857 R</i>	5'-CCAAAGTTCATAAAAAGATAAAAAGCA-3'
<i>At1g26945 F</i>	5'-AAGCTCCAACACCTCATCCCTGAACT-3'
<i>At1g26945 R</i>	5'-TTAATAATTAAGCAAGCTCCTAATGATGGCTG-3'
<i>At1g74500 F</i>	5'-ATGTCGGGAAGAAGATCACGTTTCGAGGCA-3'
<i>At1g74500 R</i>	5'-TTATTGGGTAAGTAAGCTTCTGATTAAAGCAGCTTGTCACT-3'
<i>Actin F</i>	5'-GATGGATCCTCCAATCCAGACACTGTA-3'
<i>Actin R</i>	5'-GTATTGTGTTGGACTCTGGTGATGGTGT-3'

Supplemental Table 2.

ChIP PCR primer sequences.

<i>BNQ1 F</i>	5'-TCACTTTGTAAAATTATTCTATATTTTCTG-3'
<i>BNQ1 R</i>	5'-ATAAACCTCGACAATGATGTCAC-3'
<i>BNQ2 F1</i>	5'-TCAAGCAAAGCTAGGACATGCTATTAAGGAA-3'
<i>BNQ2 R1</i>	5'-CCAAACAATACTTTCACCTTGGATACATTGATAATTTAT-3'
<i>BNQ2 F2</i>	5'-TTCCAGTAATAGATACTAAGTTCTACTAAAGTTTTTGA-3'
<i>BNQ2 R2</i>	5'-ATAAATACACCGAAGATAGATATATATCTTCTATTTTCTTATAATT-3'
<i>BNQ2 F3</i>	5'-CATCACGATCTGATAAATTTGTAAATTCA-3'
<i>BNQ2 R3</i>	5'-AGATAGAGAGAGAGAGAGAGAGCGAGAGT-3'
<i>BNQ3 F1</i>	5'-CCAAAAAAAATATGAAAGAAGGTATCCTCCAATAATCAAAC-3'
<i>BNQ3 R1</i>	5'-TTCCACATTATTTTTTTTGTCTAATCCAGTTTTTCATTTTTCTA-3'
<i>BNQ3 F2</i>	5'-ATAAATGGAAATGTTTTTCTATATAAGTTTAAAAACATAACGAGAC-3'
<i>BNQ3 R2</i>	5'-GACTAGTAGTCTTTAACGAAAGGGAAAAAAACACTCTGAATA-3'
<i>BNQ3 F3</i>	5'-TAGAAAAAACATATATAATTTTGTCAATTATATTCCATGCATA-3'
<i>BNQ3 R3</i>	5'-ATTTGTGAGTGCAAGTATTTTCTTTGTATGTTATTTATATTATAAGAG-3'
<i>AP3 F</i>	5'-GATTTAAACAGTGTCTTGTAATTA-3'
<i>AP3 R</i>	5'-GATTTGGTGGAGAGGACAAG-3'
<i>PI F</i>	5'-CATGCAAAGAGTGTCAATTAAGC-3'
<i>PI R</i>	5'-GAAGAGAGAAGTTTGACAGTTTG-3'
<i>AST101 F</i>	5'-GACGATCCGGTTTGAATGTC-3'
<i>AST101 R</i>	5'-CACAATGGTGAGATGGGAAC-3'

Supplemental Table 3.*In situ* probe primer sequences.

<i>BNQ1 F</i>	5'GCAATCTTCACAAGTGCTCCAAC-3'
<i>BNQ1 RT7</i>	5'-TATAATACGACTCACTATAGGGGTGTAGGCTTCTATAACGGCG-3'
<i>BNQ2 F</i>	5'-CTTGAACAAGGAAGCCGATGACCTCA-3'
<i>BNQ2 RT7</i>	5'-ACTAATACGACTCACTATAGGGCTCGAAATCTTATTTATTATAATTTT-3'
<i>BNQ3 F</i>	5'-ATGTCTAGCAGAAAATCACGTTCAAGA-3'
<i>BNQ3 RT7</i>	5'-ACTAATACGACTCACTATAGGGCTACTGCATAAGCAAACCTTCGGATT-3'

Supplemental Table 4.

SALK line and RNAi line primer sequences.

98881LP	5'-ATGTCTAGCAGAAAATCACGTTCAAGACAA-3'
98881RP	5'-GTCGTTTTTACGTAGTAAACTGCTCTTGTAATAGAAGT-3'
Left Border LBA1	5'-TGGTTCACGTAGTGGGCCATCG-3'
Left Border LBB1	5'-GCGTGGACCGCTTGCTGCAACT-3'
BNQ1 (att39F)	5'-CCTACTTGCCACATAGACATAGCC- 3'
BNQ1 (att39R)	5' -ATGAGTAGGCTTCTAATAACGGCG- 3'
BNQ2 (att15F)	5'GCAGGCTCTTGAACAAGGAAGCCGA-3'
BNQ2 (att15R)	5'GCTGGGTCTCGAAATCTTATTTATTATAATTT-3'

Supplemental Table 5.

Overexpression line primer sequences.

<i>BNQ1 F</i>	5'-TCTAGAGTGTATTCAAACCCCAAACACTT- 3'
<i>BNQ1 R</i>	5'-GGATCCACCTATGAAATTCGTATGTCA- 3'
<i>BNQ2 F</i>	5'-TATCGTCTAGAGACAAGCACAAACAAAGCCATCAAGAG-3'
<i>BNQ2 R</i>	5'-CATTAGGATCCCTCGAAATCTTATTTATTATAATTTTAAAGCTTAATGGAA-3'
<i>BNQ3 F</i>	5'-CGATATCTAGAATGTCTAGCAGAAAATCACGTTCAA-3'
<i>BNQ3 R</i>	5'-CTACTGGATCCCTACTGCATAAGCAAACCTTCGGAT-3'

Supplemental Table 6.

Yeast-two-hybrid primer sequences.

<i>BNQ1 F</i>	5'-ACGTAGAATTCATGTGTGTCGAACAGAAGATCAAGGCAA-3'
<i>BNQ1 R</i>	5'-ATTCAGGATCCTTACATGAGTAGGCTTCTAATAACGGC-3'
<i>BNQ2 F</i>	5'-CAAGTGAATTCATGTCTTCTAGCAGAAGGTCGAGACA-3'
<i>BNQ2 R</i>	5'-ATCATGGATCCTTATCCATTAATCAAGCTCCTAATAACTGC-3'
<i>BNQ3 F</i>	5'-ATACCGAATTCATGTCTAGCAGAAAATCACGTTCAAGA-3'
<i>BNQ3 R</i>	5'-CTAAGGGATCCCTACTGCATAAGCAAACCTTCGGATTAGT-3'
<i>At3g28857 F</i>	5'-ATACGGAATTCATGTCTAACAGAAGATCAAGACAAACTTCG-3'
<i>At3g28857 R</i>	5'-ATTCAGGATCCTTACATGAGTAAGCTTCTAATCACGGC-3'
<i>At1g26945 F</i>	5'-CATATGGAATTCATGTCTAGCAGAAGATCATCACGT-3'
<i>At1g26945 R</i>	5'-TGATAGGATCCTTAATAATTAAGCAAGCTCCTAATGAT-3'
<i>At1g74500 F</i>	5'-CGTATGAATTCATGTGCGGAAGAAGATCACGTT-3'
<i>At1g74500 R</i>	5'-CGTATGGATCCTTATTGGGTAAGTAAGCTTCTGATTAAA-3'
<i>HFR1 F</i>	5'-CTATGGAATTCATGTGCAATAATCAAGCTTTCATGGA-3'
<i>HFR1 R</i>	5'-GATCTGGATCCTCATAGTCTTCTCATCGCATGGGA-3'
<i>PIL1 F</i>	5'-CATAGGGATCCGTATGGAAGCAAAACCCTTAGCA-3'
<i>PIL1 R</i>	5'-CTCGTGGATCCTTAGTTTGGCGAGCGATAATAACTA-3'
<i>PIL5 F</i>	5'-ATCGTGAATTCATGGATCCTCAGCAGCAACC-3'
<i>PIL5R</i>	5'-GATTAGAATTCCTAACCTGTTGTGTGGTTTCCG-3'
<i>PIF3 F</i>	5'-ACTATGGATCCGTATGCCTCTGTTTGAGCTTTTCAG-3'
<i>PIF3R</i>	5'-ATCGTGAATTCACGACGATCCACAAAACCTG-3'
<i>PIF4 F</i>	5'-CGATAGAATTCATGGAACACCAAGGTTGGAGTT-3'
<i>PIF4 R</i>	5'-TACTAGAATCCCTAGTGGTCCAAACGAGAACCGT-3'