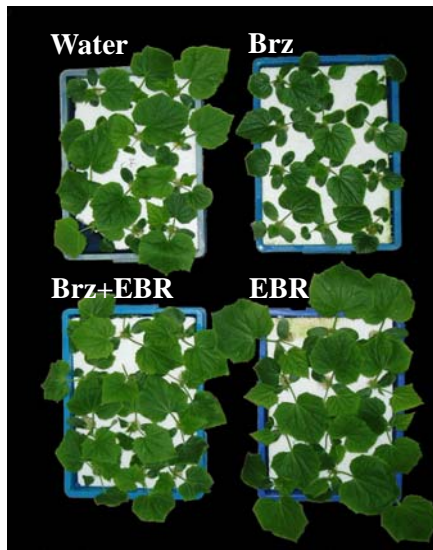
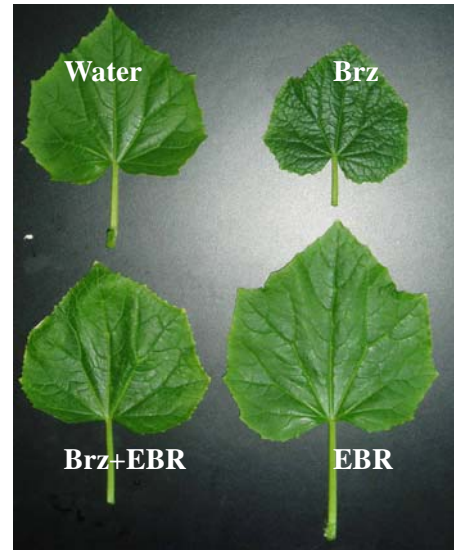
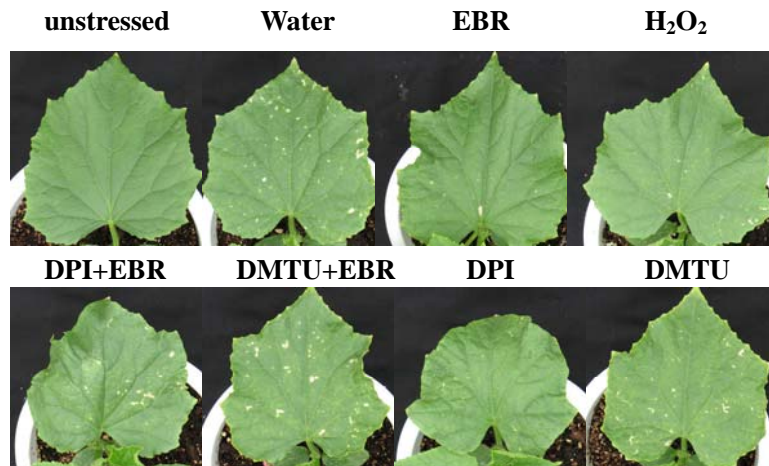


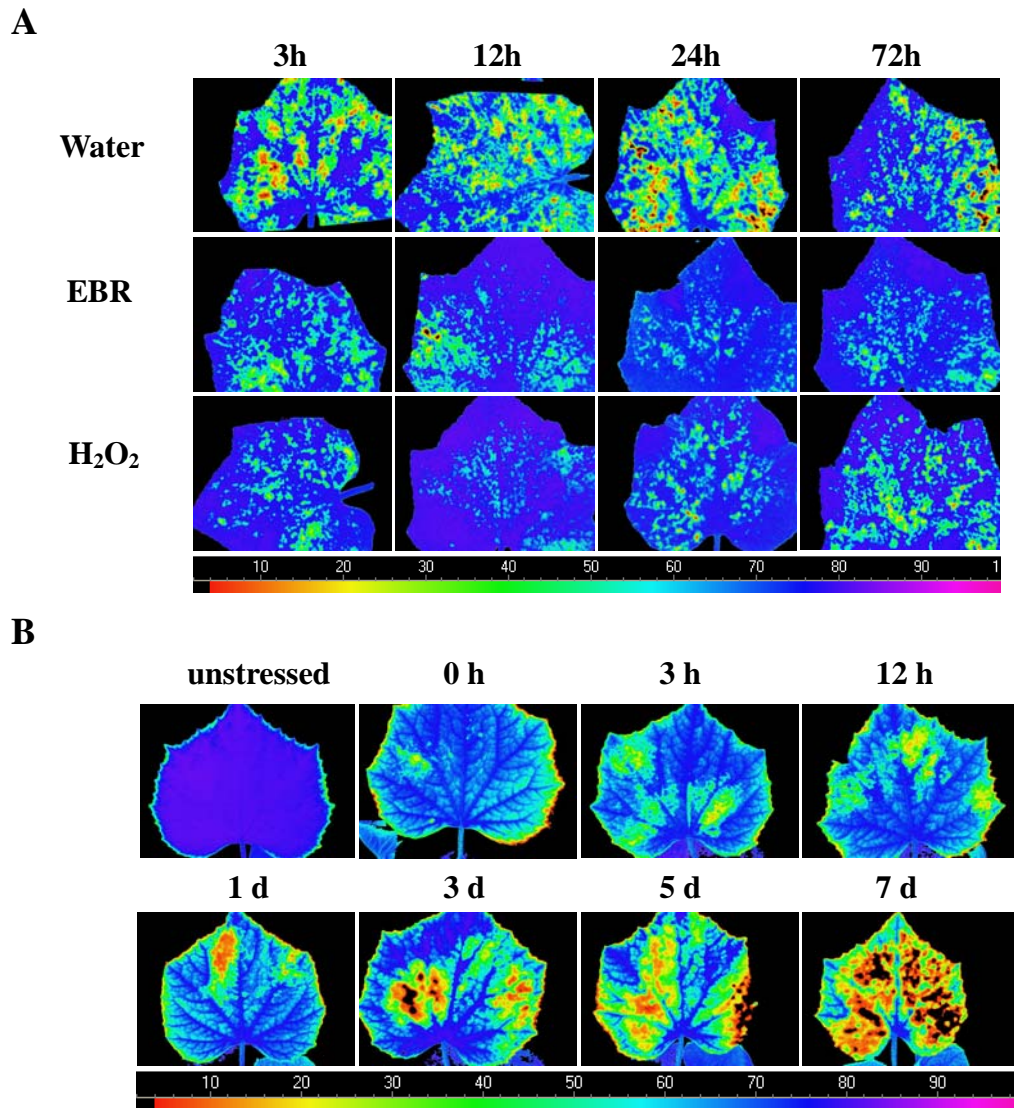
A**B**

Supplemental Figure 1 Phenotypes of four types of plants with different BR level

Cucumber seedlings were treated with 0.1 μM 24-epibrassinolide (EBR) or 4 μM brassinazole (Brz) when the cotyledons fully expanded. EBR was applied every 5 days while Brz was applied every two days. To test whether Brz cause any non-specific effects, the seedlings were co-applied with Brz and EBR (Brz+EBR) to see whether the phenotype could be restored.



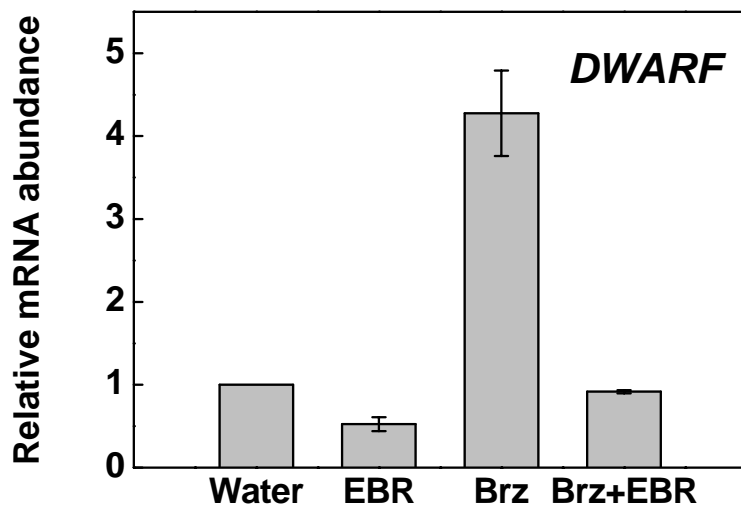
Supplemental Figure 2. Oxidative symptoms of the PQ-challenged leaves after different treatments. Plants were pretreated with 100 μ M DPI or 5 mM DMTU for 8 h and then plants were treated with 0.1 μ M EBR or 10 mM H₂O₂. After one day plants were challenged with 10 μ M PQ. Single treatment of DPI or DMTU was included as negative control.



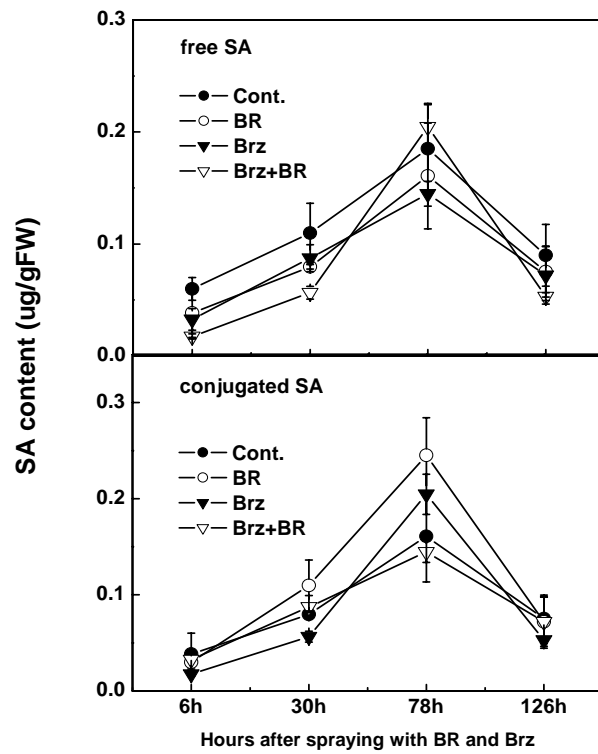
Supplemental Figure 3. Images of the maximum PSII quantum yield (Fv/Fm) of PQ-challenged leaves after different time of EBR treatment (A) and different duration of Brz treatment (B).

(A) PQ (10 μM) was applied at 3, 6, 12, 24 or 72 h after water, 0.1 μM EBR or 10 mM H₂O₂ treatment. Time zero points indicate PQ treatment only. Fv/Fm was determined after one day at 600 $\mu\text{mol m}^{-2} \text{s}^{-1}$ and 25°C.

(B) Brz (4 μM) treatment started at 7 d, 5 d, 3 d, 1 d, 12 h or 3 h before 10 μM PQ challenge. Brz treatment was repeated on alternative days until PQ challenge. Time zero points indicate PQ treatment only. Fv/Fm was determined after one day at 600 $\mu\text{mol m}^{-2} \text{s}^{-1}$ and 25°C.



Supplemental Figure 4. *DWARF* gene expression in four types of plants with different BR level. The steady-state mRNA levels of *DWARF*, which encodes a BR-6-oxidase, were determined in plant treated with water, EBR, Brz or Brz+EBR



Supplemental Figure 5. SA accumulation after EBR, Brz or Brz+EBR treatment

Table I. Primers used for real time RT-PCR assays

Gene	Primer pairs
<i>RBOH</i>	F: AAGGTTGCTGTTTATCC R: AATGGTCTTGAGTTGGG
<i>MAPK1</i>	F: ATTGATGTGTGGTCTGTAGG R:GGAGAGTATGGAAGGGATTT
<i>MAPK3</i>	F: GGAACAGATACGAAGGGGT R:TTCAGCAGCAGAAGGACGG
<i>WRKY30</i>	F: CATCTTCACCCTTCTTCAT R:CGCATCTCTGCTTCTACTG
<i>WRKY6</i>	F: GAGGAGTTGATAGTGGTGG R:TTCTTGCTCTGATTTGGTT
<i>MYB</i>	F: AGTGTTAGGCGTGGGAATA R:AGAGGTGGGTGTGGTGGTT
<i>MYC</i>	F: CGAAAAAGAGGGCGAAAG R:AGATAGCATCACCAAGGA
<i>HSP70</i>	F: GTTATTGGGATAGATTTG R:GAAGGTGTGATACGGTTT
<i>Dnaj</i>	F: CAAGGAAGGAATGGGAGGT R:TGCTGAATCATAGAGGGGC
<i>PR-1</i>	F: AACTCTGGCGGACCTTAC R:GACTTCCTCCACACTACT
<i>PAL</i>	F: ACGGTTTGCCTTCTAAT R:CATCCTGGTTGTGTTGC
<i>HPL</i>	F: CTCCTTTCTCGCTTCTCACC R:TCAAACGACACGGCATCACT
<i>GST</i>	F: TTTGAGGAGGTGAAGGTAA R:ACGCACAAGAAATGTAGAT

<i>GPX</i>	F: GTCAAGGATGCTAAAGG R: TTGTCAAAAATGGGGTA
<i>POD</i>	F: AGTGCTTGTCCAGGAGTTGA R:AGGGATGAAGTGGGATAAAG
<i>CAT</i>	F: ATGCTGGAAGAGGAGGCTAT R:ATGGTGAGGACATTTGGGAG
<i>cAPX</i>	F: ATGGGAAAGTGCTACCCTGTT R:ACAATGTCCTGGTCCGAAAG
<i>MDAR</i>	F: CTCCTTATGAGCGTCCAG R:GTGAAGCCTACAGCGACT
<i>Dwarf</i>	F: ATGAGAGGTGCTCTGCTTGC R: TAGATGAGCGGAGAGCCATC
<i>actin</i>	F: TGGACTCTGGTGATGGTGTTA R:CAATGAGGGATGGCTGGAAAA

F indicates forward and R indicates reverse.