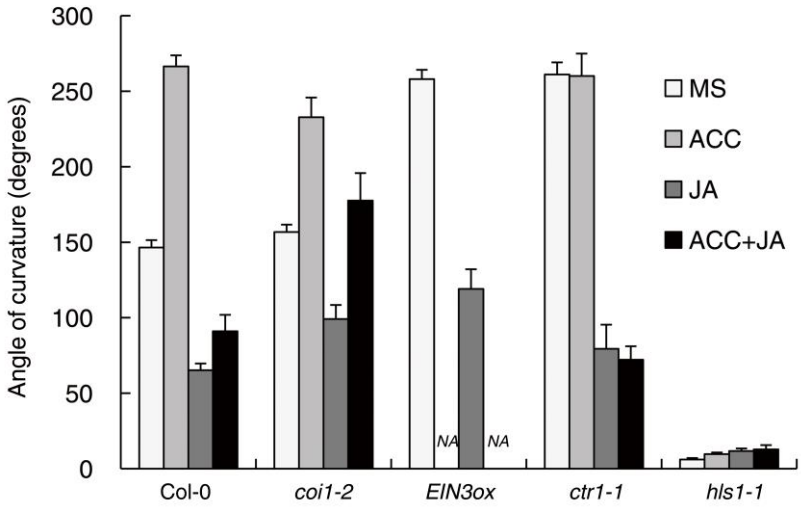
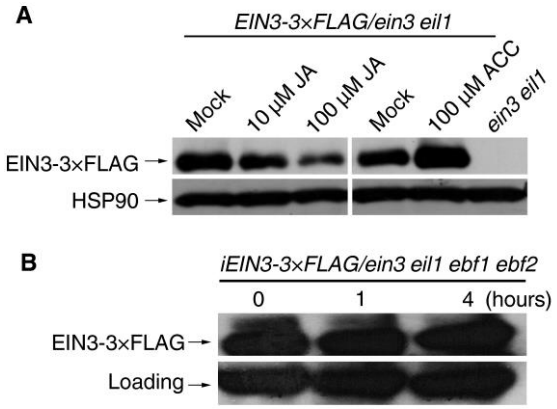


Supplemental Figure 1: JA represses ET-induced hook formation.

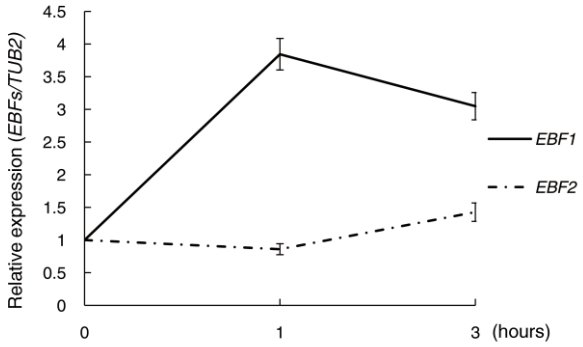
Quantification of hook angles in three-day-old etiolated seedlings grown on MS, 10 μM ACC, 50 μM JA, or 10 μM ACC plus 50 μM JA medium. Growth of *EIN3ox* was strongly inhibited on ACC medium and the hook angles were difficult to measure. NA, not available. This experiment was independently repeated twice with similar results. Mean ± s.e.m, *n*=20.



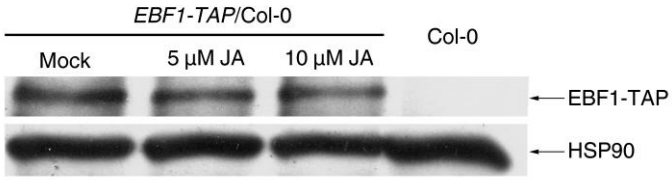
Supplemental Figure 2: JA represses EIN3 accumulation in a manner that is dependent on $SCF^{EBF1/2}$.

(A) Five-day-old light-grown seedlings (*35S:EIN3-3×FLAG/ein3 eil1*) were treated with the indicated concentrations of hormones for 4 h. Protein extracts were probed with anti-EIN3 or anti-HSP90 antibody. Arrows define the corresponding protein.

(B) JA does not alter the levels of EIN3 in *ein3 eil1 ebf1 ebf2*. Transgenic plants harboring estradiol-inducible EIN3-3×FLAG (iEIN3-3×FLAG) in the *ein3 eil1 ebf1 ebf2* background were first pre-treated with 10 μM β-estradiol for 4 h and then with 100 μM JA for additional periods. Protein extracts were probed with anti-FLAG antibody to detect EIN3 abundance. A cross-reacting non-specific band was used as the loading control. Arrows define the corresponding protein.

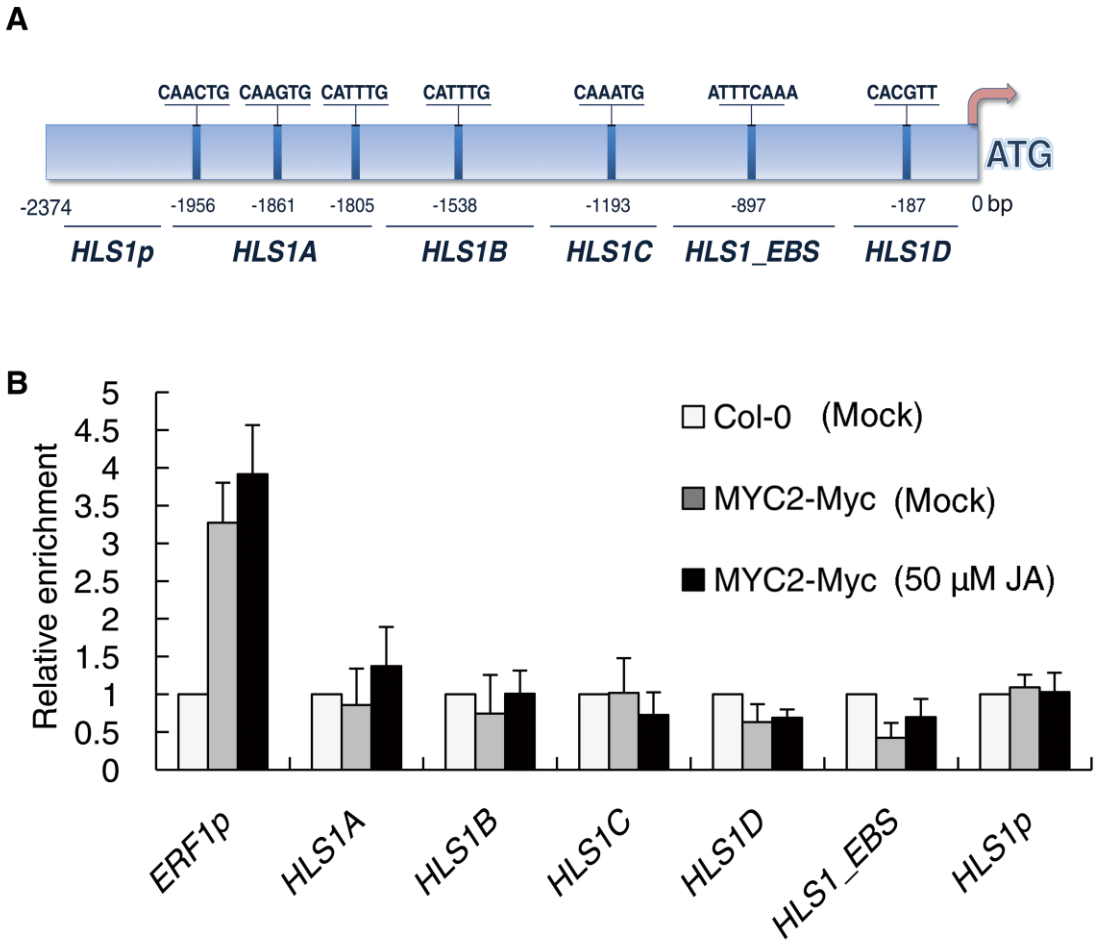


Supplemental Figure 3: JA induces *EBF1* expression but not *EBF2* expression. Three-day-old etiolated seedlings of Col-0 were treated with the indicated concentrations of JA for 1 h or 3 h. The relative expression of *EBF1* and *EBF2* was detected and normalized to *TUB2*. Mean ± s.d., $n = 3$.



Supplemental Figure 4: The protein stability of EBF1 is not affected by JA treatment.

Three-day-old etiolated seedlings (*35S:EBF1-TAP*/Col-0) grown on MS medium were treated with the indicated concentration of JA for 4 h. Protein extracts were probed with anti-MYC or anti-HSP90 antibody. Protein extracts from Col-0 were used as the negative control. Arrows define the corresponding protein.



Supplemental Figure 5. MYC2 does not bind to the *HLS1* promoter *in vivo*.

(A) Sequence analysis of the *HLS1* promoter showed five E-box motifs and a putative MYC2-binding site (*HLS1D*). The EIN3-binding site in the *HLS1* promoter (*HLS1_EBS*) is also illustrated. The pink arrow defines the transcription initiation site of the *HLS1*.

(B) ChIP assay against MYC2-Myc showed that none of the *HLS1* promoter fragments listed above was enriched by MYC2. Plant materials were collected under the same conditions as described in Figure 5C. Relative enrichment of the *HLS1* promoter fragment was normalized with *ACT2*. Mean ± s.d., n=3.

Supplemental Table 1. Primer sequences used in this study

Locus Name	Alias	Primer	Sequence (5'-3')	Purpose
At4g37580	HLS1	Forward	CACGGTTATCAAGTTAGAGC	qRT-PCR
		Reverse	GAAAGTCCCAAGCGAGA	
At2g25490	EBF1	Forward	TGTGTGGGCTCAAGGGGATAACAG	qRT-PCR
		Reverse	CCGTTACGAGCAGTGATGGCAG	
At5g62690	TUB2	Forward	GAGCCTTACAACGCTACTCTGTCTGTC	qRT-PCR
		Reverse	ACACCAGACATAGTAGCAGAAATCAAG	
At3g23240	ERF1p	Forward	AAGAGATACAATGTCCAGGTTTG	ChIP-qPCR
		Reverse	TTTATTCTTTCTTAAGCCCATCC	
At2g25490	EBF1-MBS1	Forward	AAGAATTTGTATGTTCATC	ChIP-qPCR
		Reverse	CGACTGATGACAAATTTTG	
At2g25490	EBF1-MBS2	Forward	TGATCTTGCGTACCCAATTG	ChIP-qPCR
		Reverse	GTCAGCATCGTTTATGTTG	
At4g37580	HLS1A	Forward	GGGGTACCTGTTATATATTTTGAGGGGCCACG	ChIP-qPCR
		Reverse	CGCTCGAGTGGAAACAATAAGCCTCAAGCC	
At4g37580	HLS1B	Forward	GGGGTACCTGATGATCTTTCACACCTAATGAAGTGTC	ChIP-qPCR
		Reverse	CGCTCGAGACTGCAATGTTCAAATTCACTACGAGG	
At4g37580	HLS1C	Forward	GGGGTACCTCCTCTTGCAAAATTAGAGCTGCTG	ChIP-qPCR
		Reverse	CGCTCGAGTCTACTACTAGTTCCCTTCCTTTGC	
At4g37580	HLS1D	Forward	ATCCAAATCCTATAAACTCATAGC	ChIP-qPCR
		Reverse	ATTTGTTCGAGAGGAAAGAGAAGC	
At4g37580	HLS1_EBS	Forward	CCACATCAATGCTCGTCTTA	ChIP-qPCR
		Reverse	CAGTGGCGCTATCTATTTTC	
At4g37580	HLS1p	Forward	TCAATCAAATAATGATAATCGTTGATAGTTC	ChIP-qPCR
		Reverse	ACAAATCGATATAAGATTGAACGTAAAG	