

Supplementary material

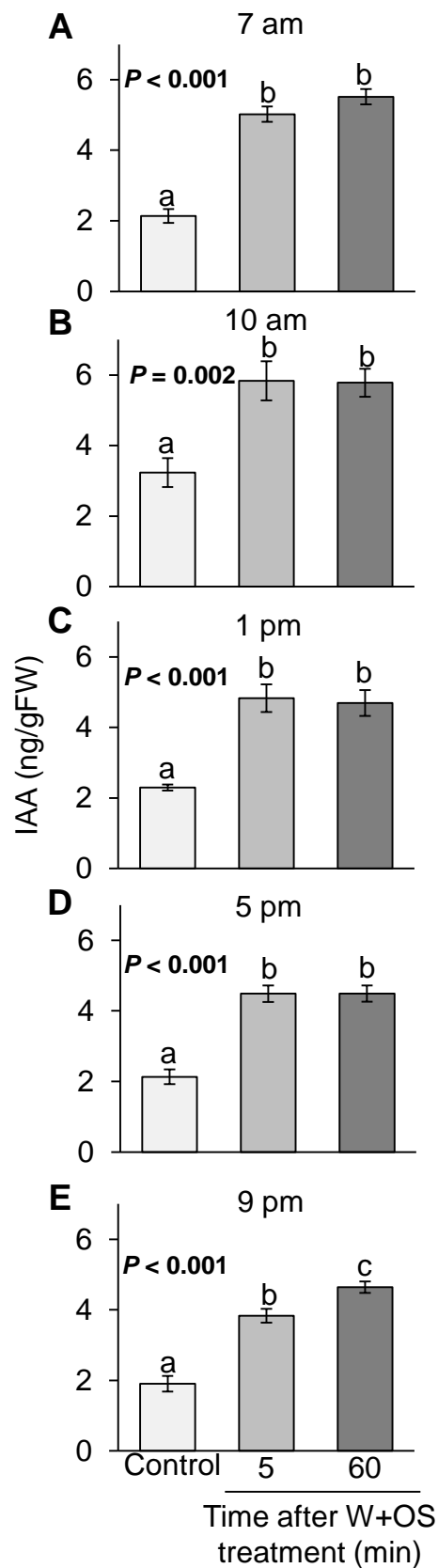


Figure S1. IAA is induced locally in response to simulated *M. sexta* herbivory independently of time of day. Average (\pm SE) IAA content in the leaves of plants that were subjected to simulated *M. sexta* attack at 7 am (a), 10 am (b), 1pm (c), 5pm (d) or 9pm (e) 5 and 60 minutes after treatments. Different letters indicate significant differences between treatments ($P < 0.05$).

	FAD-binding	Hallmark 1	NADH-binding	Hallmark 2
NaYUCCA-like 1	GAGPSGLA	WLVVATGENAE	GCGNSGME	DSVVLATGYCSNVP
NaYUCCA-like 2	GAGPSGLA	WLVVATGENAE	GCGNSGME	DSVILATGYCSNVP
NaYUCCA-like 3	GAGPSGLA	WLVVATGENAE	GCGNSGME	DSVVLATGYCSNVP
NaYUCCA-like 4	GGGPSGLA	WLVVATGENAE	GCGNSGME	DSVVLATGYCSNVP
NaYUCCA-like 5	GAGPAGLA	FLVLASGENSE	GCGNSGME	DVIVFATGFKRTH
NaYUCCA-like 6	GAGPSGLA	WLVVATGENAE	GCGNSGME	DSIILATGYKSNVP
NaYUCCA-like 7	GGGPSGLA	WLVVATGENAE	GCGNSGME	DAIILATGYKSNVP
NaYUCCA-like 8	GAGPSGLA	WLVVATGENAE	GCGNSGME	DAIILATGYKSNVP
NaYUCCA-like 9	GAGPAGIA	FLVLASGENSE	GCGNSGME	DAMVFATGYKSTVT

Figure S2. *N. attenuata* genome contains nine *YUCCA*-like genes. Multiple alignment of four conserved amino acid motifs found in the ten-membered NaYUCCA-like gene family.

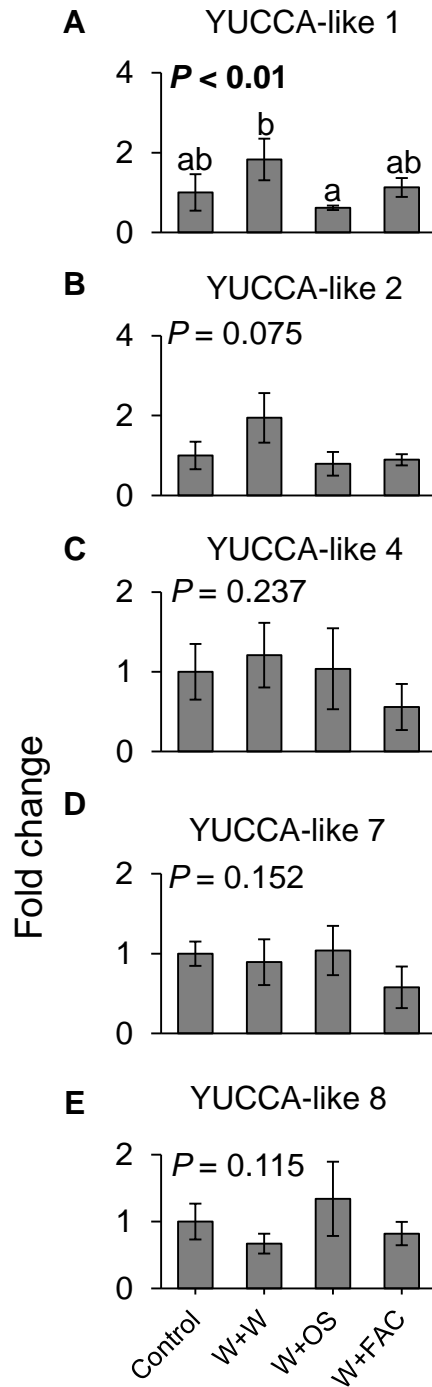


Figure S3. Gene expression patterns of YUCCA-like genes upon simulated *M. sexta* attack. Average (\pm SE) transcript abundance relative to control of YUCCA-like 1 (A), YUCCA-like 2 (B), YUCCA-like 4 (C), YUCCA-like 7 (D) and YUCCA-like 8 (E) genes followed simulated *M. sexta* attack (n=3). Different letters indicate significant differences between treatments ($P < 0.05$).

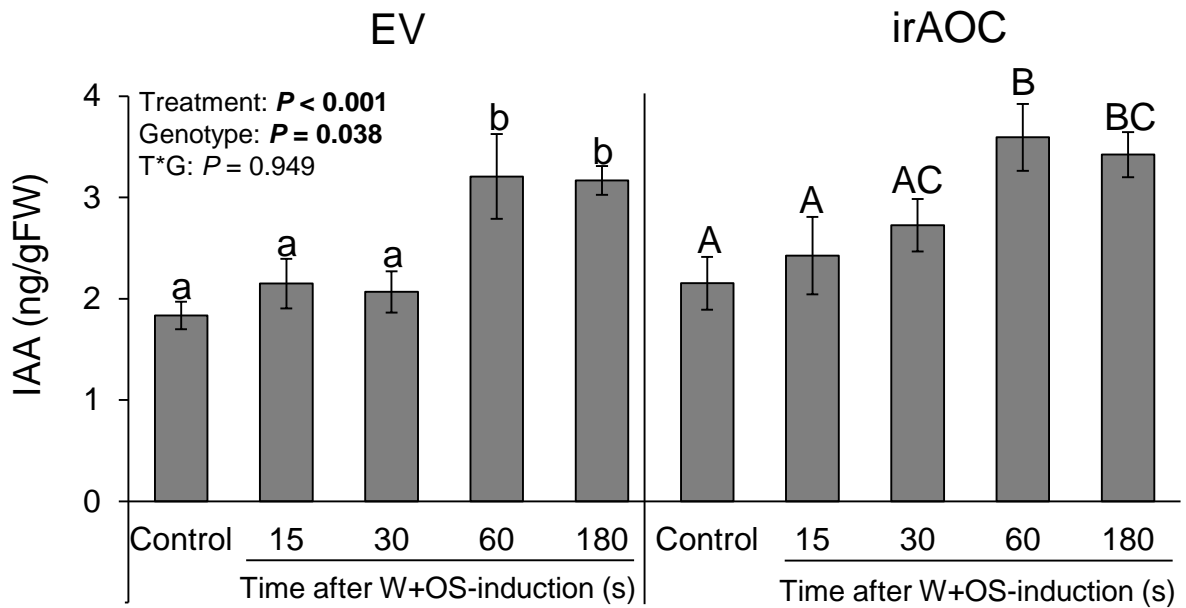


Figure S4. *Jasmonate signaling is not required for the *M. sexta*-induced accumulation of IAA.* Average (\pm SE) IAA levels in local, treated leaves of wild type plants (empty vector; EV) and jasmonate-deficient inverted repeat allene-oxide cyclase (irAOC) plants (n=5). Different letters indicate significant differences between treatments within each genotype ($P < 0.05$). W+OS: wounded and *M. sexta* oral secretions-treated plants.