

## Supplementary Data

# FMO1 is involved in excess light stress-induced signal transduction and cell death signaling

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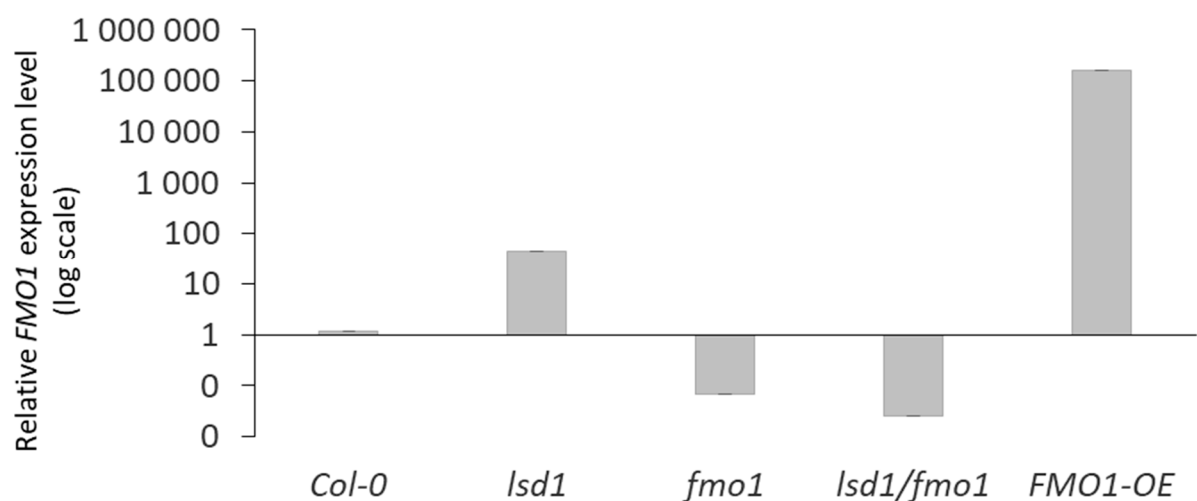
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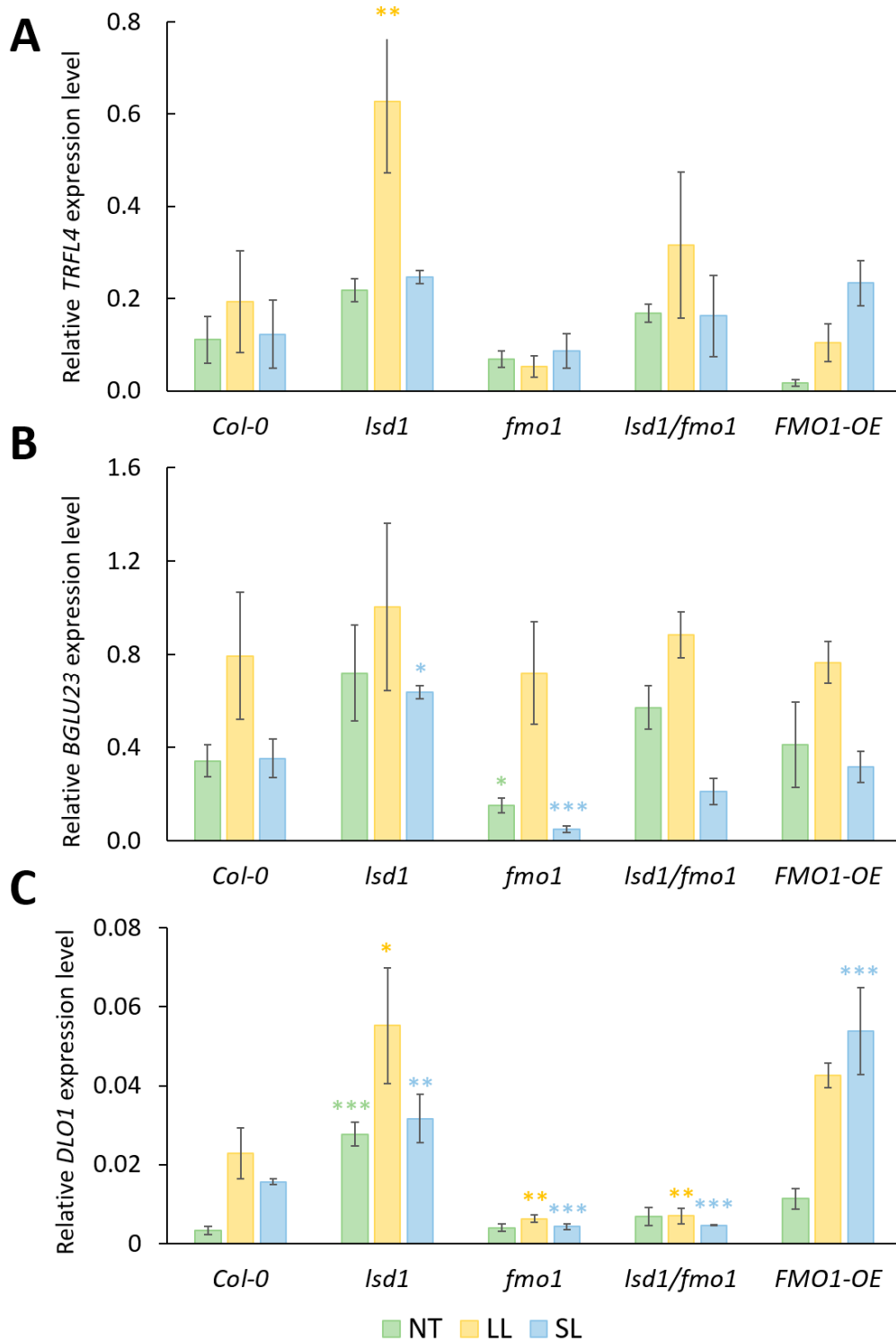
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**Supplementary Fig. 1.** Relative *FMO1* expression level in the wild type (Col-0), *lsd1*, *fmo1*, *lsd1/fmo1* mutants and the line overexpressing *FMO1* (FMO1-OE).



**Supplementary Fig. 2.** Relative expression of different ROS forms markers, *TRFL4* ( $^1\text{O}_2$ ), *BGLU23* ( $\text{O}_2^-$ ) and *DLO1* ( $\text{H}_2\text{O}_2$ ) in the wild type (*Col-0*), *lsd1*, *fmo1*, *lsd1/fmo1* mutants and the line overexpressing FMO1 (*FMO1-OE*), performed for non-treated (NT) leaves, local leaves exposed to EL stress (LL) and systemic leaves (SL). Values  $\pm$  SD are averages for 5 independent biological replicates, for which qPCRs were performed in duplicate ( $n=10$ ). Stars above the bars indicate statistically significant difference, in comparison to the wild-type, according to the t-test at a level of  $P < 0.05$  (\*),  $P < 0.005$  (\*\*) or  $P < 0.001$  (\*\*\*).



**Supplementary Fig. 3.** Rosette morphology of the wild type (Col-0), *lsd1*, *fmo1*, *lsd1/fmo1* mutants and FMO1-OE line before, 3 and 6 days post EL treatment.

**Supplementary Table 1.** Primers used for FMO1 cloning and qPCR.

Gene name	AGI code	Forward primer	Reverse primer	Application
FMO1	AT1G19250	GGGGACAAGTTTGTACAAAAAAGCAG GCTCCATGCTTCTAACTATGAT	GGGGACCACCTTTGTACAAGAAAGCTGG GCTTTAAGCAGTCATATCTTCTTT	cloning
PP2AA2 (Ref)	AT3G25800	TGCAATGGTTACAAGACAAGGTT	GCATTGCCCATTCAGGAC	qPCR
5-FCL (Ref)	AT5G13050	GCAAACCTCAATGAACATTTTGG	GATCGGTTTCATCTGCTTGC	qPCR
FMO1	AT1G19250	TGATGTTGTGATACTTGCTACTGGT	GGATGGATTGTTCCCTGTA	qPCR
TRFL4	AT3G53790	CATTTAACCATGTAAATCATCGTACC	CTCTCCTTGCCTTGCTGA	qPCR
BGLU23	AT3G09260	AACACAGACGCCTTTAGAATGTC	GAATTGCACACCAGCTTGAC	qPCR
DLO1	AT4G10500	CCCAACCGTTATCACTGTCC	AGCGACCCATTTATCATCCTT	qPCR
APX2	AT3G09640	TCATCCTGGTAGACTGGACAAA	CACATCTCTTAGATGATCCACACC	qPCR
ZAT10	AT1G27730	CCTACCACTTGTCACGCAAC	CTGAAGAAGAAGTAATGAAAGTGTGTG	qPCR