Supplementary Information

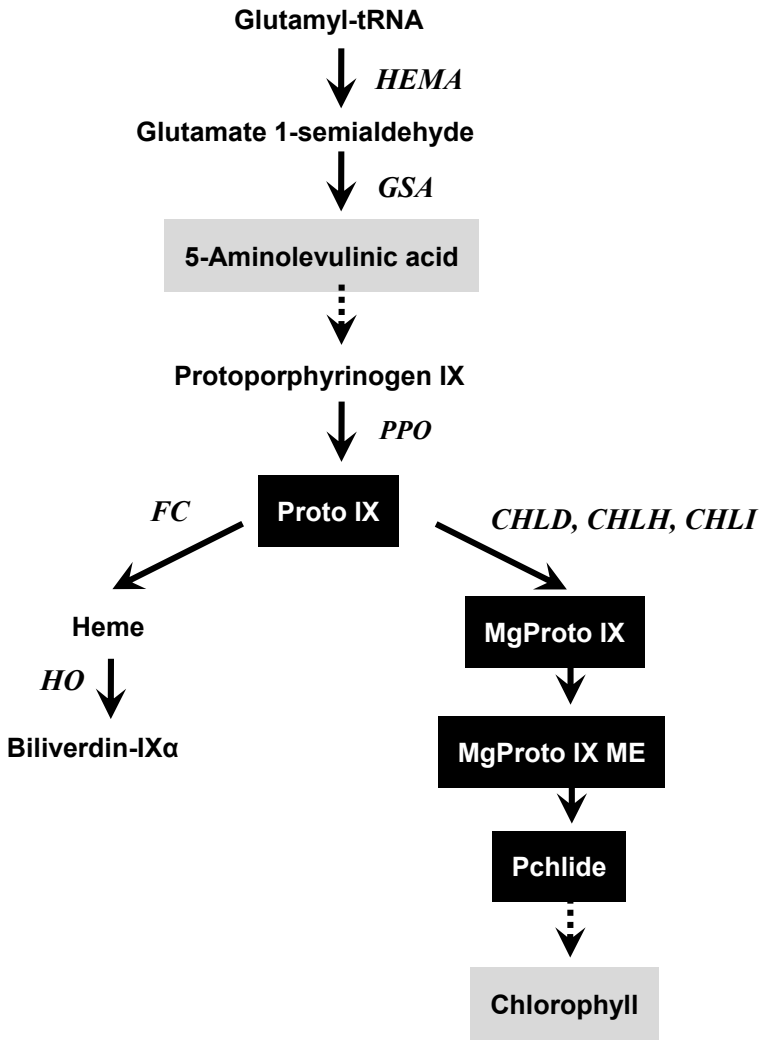

Figure S1. The porphyrin biosynthetic pathway in plants showing intermediates and genes analyzed in this study. Intermediates quantified in this study are highlighted. Intermediates: Proto IX, protoporphyrin IX; MgProto IX, Mg-protoporphyrin IX; MgProto IX ME, Mg-protoporphyrin IX methyl ester; Pchlide, protochlorophyllide. Genes and enzymes that correspond to the gene names: *HEMA*, glutamyl-tRNA reductase; *GSA*, glutamate 1-semialdehyde aminotransferase; *PPO*, protoporphyrinogen oxidase; *FC*, Fe-chelatase; *HO*, heme oxygenase; *CHLD*, D-subunit of Mg-chelatase; *CHLH*, H-subunit of Mg-chelatase; *CHLI*, I-subunit of Mg-chelatase.

Table S1. Primers used for qRT-PCR assays.

Gene	Primer Sequence
HEMA1	F: GCTATGGGTGGTGTTCGACT
	R: CGATCTTCTGGAGGCACTTC
GSA	F: CTCCGTGACTTGACGAAACA
	R: GTAGGTTCCAGGCTCCATCA
PPO1	F: ACAGTTCCTCATTGGCCATC
	R: CCCATGAAATTTTTGCTGCT
CHLD	F: TGGGACAGCAAAGACAGTGA
	R: AAGGCCAGGTTGAAACACAG
CHLH	F: GTGTGGGTTGCGTTCTTTTT
	R: GGTGACAATGTGGCTCCTCT
CHLI	F: TGTGCTTCTGGATTCTGCTG
	R: GCTGGAGCTTGTCTTGTTCC
FC2	F: TTGGTGCTATGGCAGTTTCA
	R: AGTGGAACAAAGGCAGGATG
HO2	F: AGGGACCTAGCAGCCCTAAC
	R: CCCGTATCGTCCATCTTGAG
SODA	F: ACCTTCCATCTCCCAGCAC
	R: ACAAATGGTACCCTTCAGCTT
APXA	F: ACAAAGCCCTGCTGAGTGAC
	R: TAACAGCCCACCGAGACATT
APXB	F: CCAAGTGACAAAGCCCTCAT
	R: TCTTGACAGCAAATAGCTTGG
CATA	F: CCAGTGTGATGAGTCGTTGG
	R: ATATGCAGGCTCCATTTTGG
CATB	F: AAGGATGGAAAGCCTCACCT
	R: AGGGGGATGATATCCTCTGG
CATC	F: ACAACCACTACGACGGCTT
	R: CCAGTAGGAGAGCCAGATGC
ACTIN	F: CTTCATAGGAATGGAAGCTGCGGGTA
	R: CGACCACCTTGATCTTCATGCTGCTA

F, forward; R, reverse.