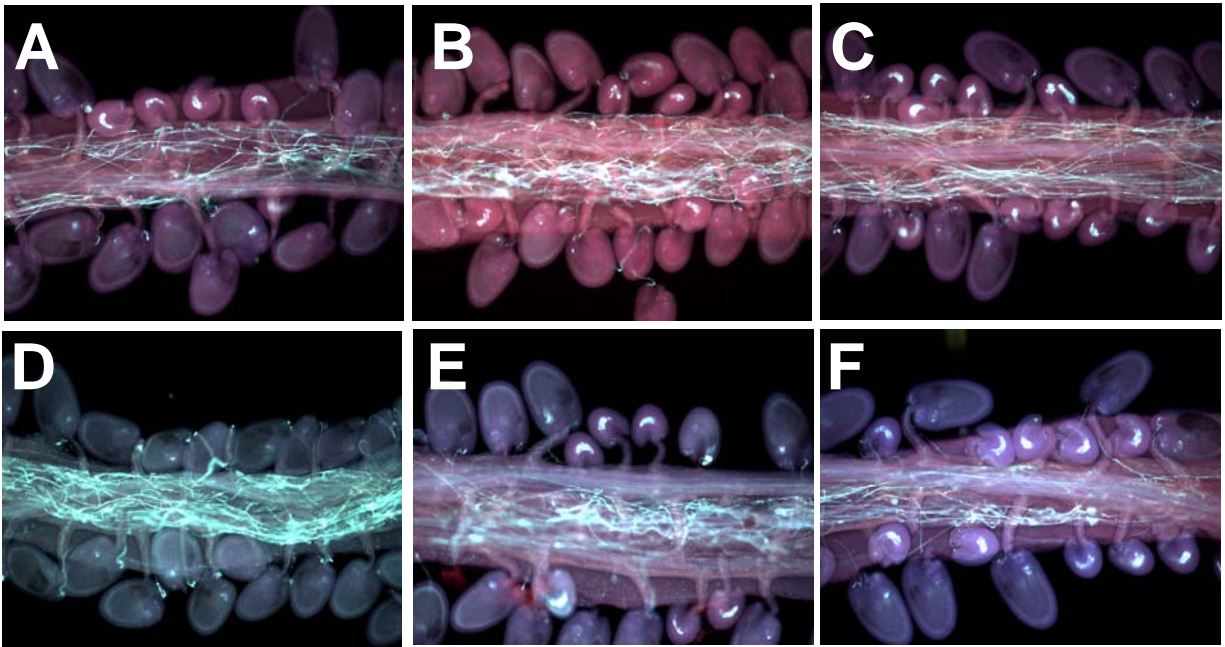
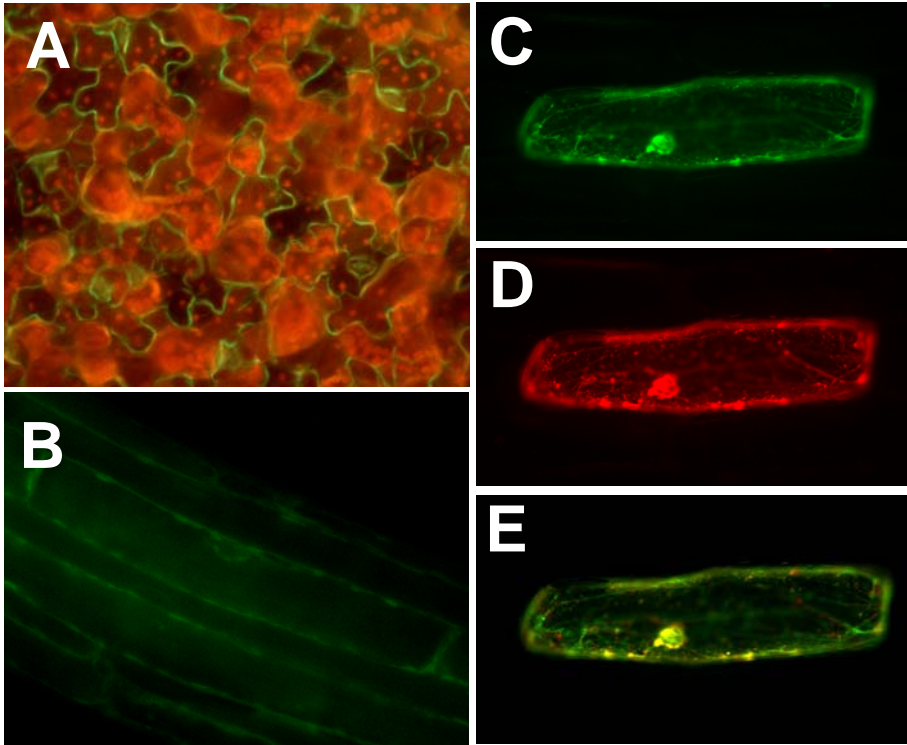


Supplemental Data. Wang et al. (2008) Truncation of a Protein Disulfide Isomerase, PDIL2-1, Delays Embryo Sac Maturation and Disrupts Pollen Tube Guidance in *Arabidopsis thaliana*



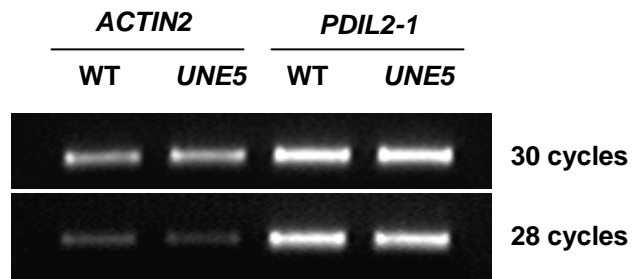
Supplemental Figure 1. Pollen tube growth defects.

(A). Silique of a Truncation 1 transgenic plant. (B). Silique of a Truncation 2 transgenic plant. (C). Silique of a PDIL2-1 CDS transgenic plant. (D). Silique of a PDIL2-1 CDSM transgenic plant. (E). Silique of a line5 heterozygous plant. (F). Silique of a line 5 homozygous plant.



Supplemental Figure 2. Subcellular Localization of PDIL2-1 and of the Truncated PDIL2-1 Missing D domain.

ProPDIL2-1:SP-YFP-PDIL2-1 expression in leaf epidermal cells (A) and in hypocotyl cells (B). D-domain truncated Silique of a Truncation 2 transgenic plant. (C). GFP-KDEL, an ER marker. (D) PDIL2-1 Δ D-tdTomato red fusion protein. (E) Overlay of (C) and (D).



Supplemental Figure 3. Expression of PDIL2-1 in wild type and UNE5.

RT-PCR with inflorescences of wild type and the UNE5 transposon insertion line. *Actin2* was used as control.

Supplemental Table 1. Embryo sac developmental stages in Line 4, 5 and *PDIL2-1*

Transgenic Plants

	Undeveloped ovules	Normal embryo sac	1 or 2-nuclei embryo sacs	4-nuclei embryo sacs	8-nuclei embryo sacs (immature, no cellularization)
Line 5 HZ	50%	48%	21%	13%	17%
Line 5 HO	70%	22%	55%	9%	10%
Line 4 HZ	50%	48%	43%	-	-
Line 5 HO	59%	51%	20%	28%	-
CDS	49%	54%	30%	14%	-
Truncation 1	40%	46%	53%	-	-
Truncation 2	59%	77%	23%	-	-

Unpollinated pistils and open flowers were used for the phenotypic analysis of embryo sac development. HZ denotes heterozygotes and HO denotes homozygotes. The last 4 columns are embryo sac phenotypes in undeveloped ovules of different lines.

Supplemental Table 2. Primers Used for Identification of T-DNA Insertion Sites

T-DNA	LP	RP
insertion lines		
FLAG_015D01	TTTCGGTATTCAGCTCCAATG	CAAATTGGCGATGACTACACC
FLAG_427G04	CTGAAGCTTTGGCTGAATACG	ACCAAAGCATCTAAGCTTTTCG
SALK_046705	TGCCTGTCCAACCTTACTTCTC	TTTCGGTATTCAGCTCCAATG
SALK_082179	AATATGTTTCAGGCACCAACG	CCTCTCCGTTTCTTTGCTAGC
SALK_135268c	CCGTGAAATTATGTGGAGAGC	CGTGGACCCTCATACTATTC
SALK_148421	TGGGAAACTTGTTTTAGCTTGG	CGAGACAACACTGCCTTCTTC
SALK_097094	TCGCTTTCTCATAAGTCCGAC	AGAACAAGTGCTCTGCTCTCTG
CS859015	CTTCTTGAAGCTTGCCCCTAG	AAAAGAAACGTTCAATCTGAGTCTC

The T-DNA specific primer for SALK insertion lines is LBb1: GCGTGGACCGCTTGCTGCAACT; for FLAG insertion lines is FLAG-LB CGTGTGCCAGGTGCCACGGAATAGT; for CS859015 is p745: AACGTCCGCAATGTGTTATTAAGTTGTC. All primers listed in this table are oriented from 5' to 3'.
