

Supplementary Material

Overexpression of *HvVDE* gene improved light protection in transgenic tobacco (*Nicotiana tabacum*)

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Table S1 The primers used in this study.

Primer name	Seq (5'-3')
VDE-R	CGGCACGGATCGGTATATGAAGG
VDE-F	TTCGGCGATACTACACTTTGC
VDE-qPCR-F	TCCCTGCAAGTTCTCACACTG
VDE-qPCR-R	CAGCTCTTGACCCACCCAAA
CHI -sc-F	gcttgcatgcctgcagCGGCACGGATCGGTATATGAAGG
CHI -sc-R	gcccttgctcacatTTCGGCGATACTACACTTTGC
CHI -oe-F	gaattcCGGCACGGATCGGTATATGAAGG
CHI -oe-R	gatccTTCGGCGATACTACACTTTGC
Q-HvActin-F	TCAAGCTGTGTTGTCCCTATAC
Q-HvActin -R	GGAAGGGCGTAACCTTCATAA

Table S2 The seed germination rate and height of OE lines and WT (n=10).

	WT	OE3	OE4	OE11
germination rates (%)	95.7±0.01	95.6±0.01	94.5±0.01	96.7±0.01
Height (cm)	20.36±0.03	21.01±0.02	19.56±0.01	20.43±0.02