

## Supplementary Materials

Table S1. Primers used in this study.

Primers Used for the Expression Cassette Construction	
PhDWF5-F	ATGGGGGAGTCTCAGTTGGC
PhDWF5-R	CTAGTAAATTCGCGGTACGACCCTGT
Erg5-UP-F	CCTTTAGTGAGGGTTGAATTCTGGTGTACTTCATTTCTCAATCAAA
Erg5-UP-R	CACAGCAGCATTGGAATTAGTCAAC
Erg5-PhDWF5-F	CTAATTCCAATGCTGCTGTGTTTTATTTAGGTTCTATCGAGGAGAAA
Erg5-PhDWF5-R	CCGAAGATCAAGTCAGGCAAATTAAGCCTTCGAGCG
Erg5-OsDWF5-F	CTAATTCCAATGCTGCTGTGTTTTATTTAGGTTCTATCGAGGAGAAA
Erg5-OsDWF5-R	CCGAAGATCAAGTCAGGCAAATTAAGCCTTCGAGCG
Erg5-XIDWF5-F	CTAATTCCAATGCTGCTGTGTTTTATTTAGGTTCTATCGAGGAGAAA
Erg5-XIDWF5-R	CCGAAGATCAAGTCAGGCAAATTAAGCCTTCGAGCG
Erg5-DOWN-F	TTGCCTGACTTGATCTTCGGTAATATAGTTACC
Erg5-DOWN-R	AGTGAGTCGTATTACGGATCCAGTTCTGGCCCATCATCGG
Erg4-UP-F	CCTTTAGTGAGGGTTGAATTCTCCACTGCTAATGTACTATATGTGGATT
Erg4-UP-R	CGAAGAGCACCTAGGGTTTAGTGGAGCTCC
Erg4-GENE-F	TAAACCCTAGGTGCTCTTCGCGCGTTTCGGT
Erg4-GENE-R	TCTAACCTCGGTGATGGTTCACGTAGTGGGC
Erg4-DOWN-F	GAACCATCACCGAGGTTAGATTACCTTGGTTCACC
Erg4-DOWN-R	AGTGAGTCGTATTACGGATCCCCATCAATCAATAGGTACGATCCA
Primers Used for the Real-Time Quantitative PCR	
ALG9-F	GTGAACAATTACACAGCTCCTATAG
ALG9-R	CCTATGATTATCTGGCAGCAGGAAAG
qPCR-XL-F	CCTGCTTTGACTTGGACTGCTGT
qPCR-XL-R	GTTCTAGCACCTTCTTGAACACC

**Figure S1:**

**The amino acid sequences of *DHCR7* from *P. angulata*, *O. sativa*, and *X. laevis*:**

**a. *P. angulata***

MGESQLAHPPLFTYVSMLTLLTIVPPFIILMWYTNVHADGSILNTFNYLKENGLQGLIDIWP  
RPTAVAGKIIICYGLFEAALQILLPGKRVEGPISPTGHRPVYKANGVAAYTVTLITYLSLWW  
FGIFNPTIVYDHLGEILSTLNIGSLIFCLLLYIKGHVAPSSTDHGSSGNIIDFYWGMELYPRIG  
KHFDIKVFTNCRFGMISWALLPITYCIKQYEEYGSLSDSMLVHTIITLVYVTKFFWWEAGY  
WNTMDIAHDRAFGYICWGCLVFLPCIYTSPGMYLVKHPVNLGPQLALSILAAGILCVYIN  
YDCDRQRQEFRRTNKGAPVWGKAPSKIVASYTTTTGETKSSILLTSGWWGLARHFHYVPE  
ILASFFWCVPALFNHFIPYFYVVYLTVLLLDRAKRDDERCKAKYGKYWKKYCEKVPYRV  
VPGIY

**b. *O. sativa***

MAKPRASAAAAKAPASTPPKTVHSALVTYASMLSLLSLCPPFVILLWYTMVHADGSSVRA  
YEHLREHGVLEGLKAIWPMPTMAAWKIIIFGFGLEAALQLLLPGKRFEGPVSPSGNVPVY  
KANGLQAYAVTLITYLSLWWFGIFNPAIVYDHLGEIYSALVFGSFVFCIFLYIKGHLAPSSSD  
SGSSGNVIIDFYWGMELYPRIGKHFDIKVFTNCRFGMMSWAVLAVTYCIKQYEMNGRVAD  
SMLVNTALMLIYVTKFFWWESGYWCTMDIAHDRAFGYICWGCLVWVPSIYTSPGMYLV  
NHPVNLGPQLALSILLAGILCIYINYDCDRQRQEFRRTNKGCSIWGKAPSKIVASYQTTNGE  
TKSSLLLTSGWWGLSRHFHYVPEILSAFFWTVPALFDHFLPYFYVIFLTILLFDRAKRDDDR  
CSSKYGKYWKMYCNKVPKRVIPGIY

**c. *X. laevis***

MGERRRANASRGDKKVANGEKQHVQWGRAWEVDYFSLASVIFLLAFAPLIVYYFVMS  
CDQYQCALTAPVLDLYSGKARLSDIWDKTPALTWTAVKIYLAWVSFQVFLYMFLPDILH  
KFVPGYEGGVQEGARTPAGLINKYQVNLQAWTITHLLWFANAYHFHWFSPATIVDNWI  
PLLWCANLLGYSVATFALVKANFFPTNANDCKFTGNFFYDYMMGIEFNPRIGKWFDLKL  
FFNGRPGIVAWTLINLSYAAKQQELYGQVTNSMILVNVLQAIYVVDDFFWNESWYLKTIDI  
CHDHFGWYLGWGDCVWLPYLYTLQGLYLVYNPVELSTTA AVAVLLLGLIGYYIFRMTN  
HQQDLFRRTNGNCKIWGKKPKSIECFYVSADGKRHYSKLMISGFWGVARHLNYTGDLN  
GSLAYCLACGFDHLLPYFYFIYMTILLVHRCIRDEHRCSSKYGKDWKLYTSAVPYRLLPG  
LF