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To study a mechanism associated with the floral induction in a short day plant, genes specifically expressed in cotyledons of *Pharbitis nil* Choisy cv. Violet during the floral induction were isolated using the technique of differential display reverse transcription by polymerase chain reactions. Three mRNA messages specifically transcribed in the induced cotyledon tissues were detected and designated *PnFL-1*, *PnFL-2* and *PnFL-3*. We cloned the full-length cDNAs of *PnFL-1* and *PnFL-2* by screening of a cDNA library and sequenced the cDNAs. The *PnFL-1* cDNA comprises 803 nucleotides with 627 bp of an ORF and the M.W. of its deduced polypeptide is 23.5 KDa. The full-length sequence of *PnFL-2* cDNA is 979 bp of an ORF and the M.W. of this gene product is 23 KDa. GenBank search reveals that the two cDNAs have no significant similarity with any genes, implying that these two are novel genes. To study functions of these genes in the process of the floral induction, we are currently attempting to construct transgenic plants either overexpressing and suppressing above two genes in *Pharbitis*.

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