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**Supplementary information**

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**Exogenous miRNAs induce post-transcriptional gene silencing in plants**

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## Supplementary Information

### Exogenous miRNAs induce post-transcriptional gene silencing in plants

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**Table S1. *amiFluc* complete sequence and oligonucleotide sequences (5' → 3') of artificial miRNAs.**

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*amiFluc* complete sequence

(underlined: Fluc targeting sequence; bold: edited complementary strand in the hairpin)

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*amiFluc* CAAACACACGCTCGGACGCATATTACACATGTTTCATACACTTAATACTCGCTGTTTTGAATTGATGTTTTA  
 GGAATATATATGTAGACGAGAAAACGCTGCGCGTTATCACAGGTCGTGATATGATTCAATTAGCTTCCG  
 ACTCATTCACAAATACCGAGTCGCCAAAATCAAACCTAGACTCGTTAAATGAATGAATGATGCGGATG  
 ACAAATTGGATCATTGATTCTCTTTGA**TTAACGCCAGCGTTTTCCCG**TCTCTCTTTGTATTCCAATTTCT  
 TGATTAATCTTTCCTGCACAAAACATGCTTGATCCACTAAGTGACATATATGCTGCCTTCGTATATATAG  
 TTCTGGTAAAATTAACATTTTGGGTTTATCTTTATTTAAGGCATCGCCATG

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miRNA	Mature strand	Complementary strand
<i>miR399d</i>	UGCCAAAGGAGAUUUGCCCCG	UACUGGGCGAAUACUCCUAUGG
<i>miR156a</i>	UGACAGAAGAGAGUGAGCAC	GCUCACUGCUCUUUCUGUCAGA
<i>miR319b</i>	UUGGACUGAAGGGAGCUCCU	AGAGCUUUCUUCGGUCCACUC

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**Table S2. List of oligonucleotides used for cloning.**

<b>Name</b>	<b>Sequence (5'→3')</b>
pUBQ10-Fw	CACCGTCATTATCCTATGCAAATC
pUBQ10-5'UTR <sub>PHO2</sub> -Fw	CACACACGAGGTGGGATACT
pUBQ10-5'UTR <sub>PHO2</sub> -Rv	AGTATCCACCTCGTGTGTG
5'UTR <sub>PHO2</sub> -Rv	AGTTTAGACGCCTGCCATGGA ACTG
SPL9-Fw	CACCATGGAGATGGGTTCCAAC
SPL9-Rv	GAGACCAGTTGGTATGGTGAGAAG
pPHO2-Fw	CACCAACCAGAACTAGATCGCGTCA
pPHO2-Rv	AGTTTAGACGCCTGCCATGGA ACTG

**Table S3. Stem-Loop primers used for miRNA expression analysis using RT-qPCR.**

<b>miRNA</b>	<b>Stem-Loop primer</b>	<b>Forward primer (5'→3')</b>	<b>Universal Reverse primer (5'→3')</b>
<i>miR156a</i>	GTCGTATCCAGTGCAGGGTCCGAGGTATTC GCACTGGATACGACGTGCTC	GCGGCGGTGACAGAAGAGAGT	GTGCAGGGTCCGAGGT
<i>miR399d</i>	GTCGTATCCAGTGCAGGGTCCGAGGTATTC GCACTGGATACGACCGGGGCAAA	CGACGTGCCAAAGGAGATTTG	
<i>miR399*</i>	GTTGGCTCTGGTGCAGGGTCCGAGGTA TTCGCAC CAGAGCCAACCCATAG	GTGTACTGGGCGAATACTC	
<i>amiFluc</i>	GTCGTATCCAGTGCAGGGTCCGAGGTATTC GCACTGGATACGACCGGGAA	GCGGCGGTTAACGCCAGCGT	

**Table S4. List of primer sequences used for qPCR analysis.**

<b>Name</b>	<b>Forward primer (5'→3')</b>	<b>Reverse primer (5'→3')</b>
<i>At4g05320 (UBQ10)</i>	GGCCTTGATAATCCCTGATGAATAAG	AAAGAGATAACAGGAACGGAAACATAGT
<i>At2g33770 (PHO2)</i>	AGCTGACCGTTGCTGTCAGTC	CGGTGTAGCTTCCTGTTTGT
<i>At2g33810 (SPL3)</i>	CTTAGCTGGACACAACGAGAGAAGGC	GAGAAACAGACAGAGACACAGAGGA
<i>At2g42200 (SPL9)</i>	TGTGGCTGGTATCGAACAGAGG	TTCCGGAAGCTGATGAAACCTG
<i>At1G27370(SPL10)</i>	GTGGGAGAATGCTCAGGAGGC	GAGTGTGTTTGATCCCTTGTAATCC
<i>5'UTR<sub>PHO2</sub>Fluc</i>	TTCCATGGCAGGCGTCTAAA	AGGAACCAGGGCGTATCTCT

**Table S5. Oligonucleotide sequences used for 5' RACE-PCR.**

<b>Name</b>	<b>Forward primer (5'→3')</b>
5' RACE Adapter	CUGAUGGCGAUGAAUGAACACUGCGUUUGCUGGCUUUGAUGAAA
5'RACE Outer primer	GCTGATGGCGATGAATGAACACTG
5'RACE Inner primer	CGCGGATCCGAACACTGCGTTTGCTGGCTTTGATG
UBQ10 F	GGCCTTGTATAATCCCTGATGAATAAG
UBQ10 F	AAAGAGATAACAGGAACGGAAACATAGT
5'UTR <sub>PHO2</sub> F1	CTGTTTCCCATTTATACTTCAGATTC
FLUC R1	CGTTCATTATAAATGTCGTTTCGC
FLUC R2	AGGAACCAGGGCGTATCTCT