

**Supplementary Table 1** Summary of regulation patterns of disease-related miRNAs in different plants

miRNA	Targets	Pathogens	Plant	References
<b>Positive regulation</b>				
miR863-3p	<i>ARLPK1, ARLPK2</i> , <i>SERRATE</i>	B: <i>Pseudomonas syringae</i>	<i>Arabidopsis thaliana</i>	[65]
miR393	F-box auxin receptors	B: <i>Pseudomonas syringae</i>	<i>Arabidopsis thaliana</i>	[31]
miR393b*	<i>MEMB12</i>	B: <i>Pseudomonas syringae</i>	<i>Arabidopsis thaliana</i>	[37]
miR393	auxin receptors	O: <i>Hyaloperonospora arabidopsidis</i>	<i>Arabidopsis thaliana</i>	[66]
miR161	<i>PPR</i>	O: <i>Phytophthora capsici</i>	<i>Arabidopsis thaliana</i>	[45]
osa-miR398b	<i>CDS1, CDS2, CCSD, SODX</i>	F: <i>Magnaporthe oryzae</i>	Rice ( <i>Oryza sativa</i> )	[36]
osa-miR160	ARF TF: <i>ARF16</i>	F: <i>Magnaporthe oryzae</i>	Rice ( <i>Oryza sativa</i> )	[67]
osa-miR7695	<i>OsNramp6</i>	F: <i>Magnaporthe oryzae</i>	Rice ( <i>Oryza sativa</i> )	[68]
miR166k-166h	ethylene-insensitive 2 gene ( <i>EIN2</i> )	F: <i>Magnaporthe oryzae</i> ; <i>Fusarium fujikuroi</i>	Rice ( <i>Oryza sativa</i> )	[69]
PN-2013	<i>TaMDHAR</i>	<i>Puccinia striiformis</i> f. sp. <i>tritici</i> (Pst)	Wheat ( <i>Triticum aestivum</i> )	[70]
Can-miRn37a	ethylene response factors (ERF)	F: <i>Colletotrichum truncatum</i>	Chilli ( <i>Capsicum annum</i> )	[34]
ghr-miR477	<i>GhCBP60A</i>	F: <i>Verticillium dahliae</i>	Cotton ( <i>Gossypium hirsutum</i> )	[71]
gh-miR159	<i>HiC-15</i>	F: <i>Verticillium dahliae</i>	Cotton ( <i>Gossypium hirsutum</i> )	[43]
gh-miR166	<i>Clp-1</i>	F: <i>Verticillium dahliae</i>	Cotton ( <i>Gossypium hirsutum</i> )	[43]
miR156	TFs	F: <i>Botryosphaeria dothidea</i>	<i>Populus trichocarpa</i>	[72]
miR1448	NBS-LRR	F: <i>B. dothidea</i>	<i>Populus trichocarpa</i>	[72]
miR164	NBS-LRR	F: <i>B. dothidea</i>	<i>Populus trichocarpa</i>	[72]
miR472a	NBS-LRR	F: <i>Cytospora chrysosperma</i>	<i>Populus alba</i> × <i>P. glandulosa</i> (84K)	[23]
miR172a/b	AP2/ERF	O: <i>Phytophthora</i>	Tomato ( <i>Solanum</i> )	[73]

		<i>infestans</i>	<i>lycopersicum</i> )	
<b>Negative regulation</b>				
miR396	GRF	F: <i>Plectosphaerella cucumerina</i> ; <i>Botrytis cinerea</i> ; <i>Fusarium oxysporum</i> ; <i>Colletotrichum higginsianum</i>	<i>Arabidopsis thaliana</i>	[74]
ath-miR164c	<i>AtP5CS1</i>	B: <i>P. syringae</i>	<i>Arabidopsis thaliana</i>	[75]
miR164	<i>NAC4</i> (At5g07680)	B: <i>Alternaria brassicicola</i> ; <i>Pseudomonas syringae</i> ; flg22	<i>Arabidopsis thaliana</i>	[76]
miR394	<i>LEAF CURLING RESPONSIVENE SS (LCR)</i>	F: <i>Botrytis cinerea</i>	<i>Arabidopsis thaliana</i>	[77]
miR393	auxin receptors	B: <i>Alternaria brassicicola</i>	<i>Arabidopsis thaliana</i>	[66]
miR398b	CSD1, CSD2	B: <i>Pseudomonas syringae pv tomato DC3000</i>	<i>Arabidopsis thaliana</i>	[78]
miR825*	TIR-NBS-LRR	F: <i>Botrytis cinerea</i>	<i>Arabidopsis thaliana</i>	[39]
miR5819	CPuORF3-OsbZI P38	F: <i>Magnaporthe oryzae</i>	Rice ( <i>Oryza sativa</i> )	[79]
miRNA5075	CPuORF4-OsbZI P27	F: <i>Magnaporthe oryzae</i>	Rice ( <i>Oryza sativa</i> )	[79]
miRNA2101	CPuORF7-SAM decarboxylase	F: <i>Magnaporthe oryzae</i>	Rice ( <i>Oryza sativa</i> )	[79]
miR168	AGO1, AGO18	viruliferous (RSV and RDV-carrying) insects	Rice ( <i>Oryza sativa</i> )	[80]
miR169	nuclear factor Y-A (NF-YA)	F: <i>Magnaporthe oryzae</i>	Rice ( <i>Oryza sativa</i> )	[81]
miRNA528	L-ascorbate oxidase (AO)	rice stripe virus (RSV)	Rice ( <i>Oryza sativa</i> )	[35]
miR159	<i>GAMYB</i>	O: <i>Phytophthora parasitica</i>	Rice ( <i>Oryza sativa</i> ) and Tobacco ( <i>Nicotiana tabacum</i> )	[82]
nta-miR6019	NB-LRR	tobacco mosaic virus (TMV)	Tobacco ( <i>Nicotiana tabacum</i> )	[27]

nta-miR6020	NB-LRR	tobacco mosaic virus (TMV)	Tobacco ( <i>Nicotiana tabacum</i> )	[27]
tae-miR164	TaNAC21/22	F: <i>Puccinia striiformis</i> f. sp. <i>tritici</i> (Pst)	Wheat ( <i>Triticum aestivum</i> )	[83]
miR408b	-	F: <i>Fusarium verticillioides</i>	Maize ( <i>Zea mays</i> )	[84]
stu-miR482e	NBS-LRR	F: <i>Verticillium dahliae</i>	Potato ( <i>Solanum tuberosum</i> )	[20]
miR482 miR2118	NBS-LRR	F: <i>Pseudomonas syringae</i>	Tomato ( <i>Solanum lycopersicum</i> )	[5]
slmiR482e-3p	NBS-LRR	F: <i>Fusarium oxysporum</i>	Tomato ( <i>Solanum lycopersicum</i> )	[85]
slmiR482f	NB-LRR	F: <i>F. oxysporum</i>	Tomato ( <i>Solanum lycopersicum</i> )	[22]
slmiR5300	NB-LRR	F: <i>F. oxysporum</i>	Tomato ( <i>Solanum lycopersicum</i> )	[21]
sly-miR6024	<i>I2</i> homologues	tomato yellow leaf curve virus (TYLCY)	Tomato ( <i>Solanum lycopersicum</i> )	[86]
Md-miRLn11	<i>Md-NBS</i>	B: <i>Alternaria alternata</i> f.sp.mali	<i>Malus domestica</i> cv. <i>Golden Delicious</i>	[87]
miR472a	NBS-LRR	F: <i>Colletotrichum gloeosporioides</i>	<i>Populus alba</i> × <i>P. glandulosa</i> (84K)	[23]

B: bacterium; F: fungus; O: oomycete