

عنوان مقاله:

MicroRNA-mediated Resistance to Plant Viruses

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نویسندگان:

Amir Ghaffar Shahriari - *Department of Agriculture and Natural Resources, Higher Education Center of Eghlid, Eghlid, Iran*

Aminallah Tahmasebi - *Plant Virology Research Center, Shiraz University, Shiraz, Iran*

خلاصه مقاله:

MicroRNAs (miRNAs) are 20-24 nucleotide small RNAs which are processed from nuclear-encoded transcripts. miRNAs control the expression of target transcripts by cleaving or translational inhibition of the target RNAs. Artificial microRNAs (amiRNAs) are modified endogenous miRNA precursors in which the miRNA: miRNA duplex is replaced with sequences to silence a target gene. amiRNAs are used as new transformation techniques in eukaryotes and have been proven to be more effective in specificity and stability than other RNA-mediated gene silencing methods. amiRNA-based antiviral defense is an effective and new approach to engineer resistance to plant viruses. Here, we summarize the role of miRNAs in resistance to plant viruses.

کلمات کلیدی:

amiRNA, Gene silencing, miRNA, Plant viruses, Resistance

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