

Resource Summary Report

Generated by [nidm-terms](#) on Jul 28, 2026

CyMATE

RRID:SCR_005442

Type: Tool

Proper Citation

CyMATE (RRID:SCR_005442)

Resource Information

URL: <http://www.cymate.org/>

Proper Citation: CyMATE (RRID:SCR_005442)

Description: A web application that allows you to perform a quick and comprehensive methylation analysis of cytosine sites in DNA sequences.

Abbreviations: CyMATE

Synonyms: Cytosine Methylation Analysis Tool for Everyone

Resource Type: analysis service resource, service resource, data analysis service, production service resource

Defining Citation: [PMID:17559516](#)

Resource Name: CyMATE

Resource ID: SCR_005442

Alternate IDs: OMICS_00597

Old URLs: <http://www.gmi.oeaw.ac.at/research-groups/cymate/cymate/>

Record Creation Time: 20220129T080230+0000

Record Last Update: 20260728T043217+0000

Ratings and Alerts

No rating or validation information has been found for CyMATE.

No alerts have been found for CyMATE.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 63 mentions in open access literature.

Listed below are recent publications. The full list is available at [nidm-terms](#).

Kellari LM, et al. (2025) Cross-kingdom RNAi induced by a beneficial endophytic fungus to its host requires transitivity and amplification of silencing signals. *Plant biology (Stuttgart, Germany)*, 27(4), 504.

Liang Z, et al. (2025) XYLEM NAC DOMAIN 1 (EjXND1) relieves cold-induced lignification by negatively regulating the EjHB1-EjPRX12 module in loquat fruit. *Journal of advanced research*, 73, 93.

Peng J, et al. (2025) LEC2 induces somatic cell reprogramming through epigenetic activation of plant cell totipotency regulators. *Nature communications*, 16(1), 4185.

Zicola J, et al. (2025) Vegetative to generative1 (Vgt1) is an enhancer affecting flowering time and jasmonate signaling in maize by promoting the expression of *Zea mays* Related to APETALA 2.7. *Plant physiology*, 199(3).

Xu J, et al. (2024) Hypermethylation in the promoter regions of flavonoid pathway genes is associated with skin color fading during 'Daihong' apple fruit development. *Horticulture research*, 11(3), uhae031.

Niu X, et al. (2024) Regulatory mechanism of heat-active retrotransposons by the SET domain protein SUVH2. *Frontiers in plant science*, 15, 1355626.

Li H, et al. (2023) Methionine biosynthesis enzyme MoMet2 is required for rice blast fungus pathogenicity by promoting virulence gene expression via reducing 5mC modification. *PLoS genetics*, 19(9), e1010927.

Dalakouras A, et al. (2023) A beneficial fungal root endophyte triggers systemic RNA silencing and DNA methylation of a host reporter gene. *RNA biology*, 20(1), 20.

Montacié C, et al. (2023) NICOTIANAMINE SYNTHASE activity affects nucleolar iron accumulation and impacts rDNA silencing and RNA methylation in *Arabidopsis*. *Journal of experimental botany*, 74(15), 4384.

Williams BP, et al. (2022) Somatic DNA demethylation generates tissue-specific methylation states and impacts flowering time. *The Plant cell*, 34(4), 1189.

Wang Z, et al. (2021) ARGONAUTE 2 increases rice susceptibility to rice black-streaked dwarf virus infection by epigenetically regulating HEXOKINASE 1 expression. *Molecular plant pathology*, 22(9), 1029.

Fei Y, et al. (2021) Non-perfectly matching small RNAs can induce stable and heritable epigenetic modifications and can be used as molecular markers to trace the origin and fate of silencing RNAs. *Nucleic acids research*, 49(4), 1900.

Wang H, et al. (2021) Response of Wheat DREB Transcription Factor to Osmotic Stress Based on DNA Methylation. *International journal of molecular sciences*, 22(14).

Konečná K, et al. (2021) Distinct Responses of Arabidopsis Telomeres and Transposable Elements to Zebularine Exposure. *International journal of molecular sciences*, 22(1).

Choi WL, et al. (2021) Application of 5-Methylcytosine DNA Glycosylase to the Quantitative Analysis of DNA Methylation. *International journal of molecular sciences*, 22(3).

Li D, et al. (2021) Genome-wide identification and transcriptional characterization of DNA methyltransferases conferring temperature-sensitive male sterility in wheat. *BMC genomics*, 22(1), 310.

Sun C, et al. (2021) The R2R3-type MYB transcription factor MdMYB90-like is responsible for the enhanced skin color of an apple bud sport mutant. *Horticulture research*, 8(1), 156.

Pérez-Cañamás M, et al. (2020) Epigenetic Changes in Host Ribosomal DNA Promoter Induced by an Asymptomatic Plant Virus Infection. *Biology*, 9(5).

Ferrafiat L, et al. (2019) The NRPD1 N-terminus contains a Pol IV-specific motif that is critical for genome surveillance in Arabidopsis. *Nucleic acids research*, 47(17), 9037.

Li Y, et al. (2019) The grapevine homeobox gene VvHB58 influences seed and fruit development through multiple hormonal signaling pathways. *BMC plant biology*, 19(1), 523.