

Resource Summary Report

Generated by [PRECISE-TBI](#) on Jul 30, 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: service resource, production service resource, analysis service resource, data analysis service

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: 20260731T042712+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 [PRECISE-TBI](#) .

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.