

Resource Summary Report

Generated by SPARC SAWG on Jul 28, 2026

PlantCyc

RRID:SCR_002110

Type: Tool

Proper Citation

PlantCyc (RRID:SCR_002110)

Resource Information

URL: <https://plantcyc.org/content/plantcyc-15.2.0>

Proper Citation: PlantCyc (RRID:SCR_002110)

Description: Multi species reference database. Comprehensive plant biochemical pathway database, containing curated information from literature and computational analyses about genes, enzymes, compounds, reactions, and pathways involved in primary and secondary metabolism.

Abbreviations: PMN

Resource Type: portal, project portal, database, data or information resource

Defining Citation: [PMID:20522724](#)

Keywords: enzyme, gene, biochemical pathway, compound, metabolism, plant metabolic, reaction, database

Funding: NSF 1026003;
NSF 0640769

Availability: Free, Available for download, Freely available

Resource Name: PlantCyc

Resource ID: SCR_002110

Alternate IDs: , nif-0000-20890, nlx_15806 plant

Alternate URLs: <http://www.plantcyc.org/>

Record Creation Time: 20220129T080211+0000

Record Last Update: 20260728T043123+0000

Ratings and Alerts

No rating or validation information has been found for PlantCyc.

No alerts have been found for PlantCyc.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 3633 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Secomandi E, et al. (2025) Biochemical, photosynthetic and metabolomics insights of single and combined effects of salinity, heat, cold and drought in Arabidopsis. *Physiologia plantarum*, 177(1), e70062.

Amrutha S, et al. (2025) Network pharmacology and metabolomics analysis of *Tinospora cordifolia* reveals BACE1 and MAOB as potential therapeutic targets for neuroprotection in Alzheimer's disease. *Scientific reports*, 15(1), 8103.

Secomandi E, et al. (2025) Phenotyping and metabolomics insights into the effect of melatonin in lettuce under non-stress and salinity conditions. *Physiologia plantarum*, 177(1), e70055.

Hernández-Peña R, et al. (2025) Unravelling Vanillin Biosynthesis: Integrative Transcriptomic and Metabolomic Insights into *Vanilla planifolia* Pod Development. *Journal of agricultural and food chemistry*, 73(30), 19094.

Kretschmer F, et al. (2025) Coverage bias in small molecule machine learning. *Nature communications*, 16(1), 554.

Persaud M, et al. (2025) Untargeted Metabolomics and Targeted Phytohormone Profiling of Sweet Aloes (*Euphorbia neriifolia*) from Guyana: An Assessment of Asthma Therapy Potential in Leaf Extracts and Latex. *Metabolites*, 15(3).

Rai AB, et al. (2025) Mapping growth differentiation factor-15 (GDF15)-mediated signaling pathways in cancer: insights into its role across different cancer types. *Discover oncology*, 16(1), 386.

Yan L, et al. (2025) Nontargeted Metabolomic Profiling of a Single *Paeonia Lactiflora* Plant and its Quality Marker Identification. *ChemistryOpen*, 14(8), e202400520.

Hawkins C, et al. (2025) Plant Metabolic Network 16: expansion of underrepresented plant groups and experimentally supported enzyme data. *Nucleic acids research*, 53(D1), D1606.

Yadav HK, et al. (2025) Telomere-to-telomere genome assembly of linseed (*Linum usitatissimum* L.) for functional genomics and accelerated genetic improvement. *Plant biotechnology journal*, 23(9), 3919.

Li Y, et al. (2025) Comparative transcriptome analysis reveal gene regulation of dormancy release in *Cardiocrinum giganteum* seeds induced by temperature. *Frontiers in plant science*, 16, 1591781.

Sas E, et al. (2025) Untargeted metabolomics reveals anion and organ-specific metabolic responses of salinity tolerance in willow. *The Plant journal : for cell and molecular biology*, 122(1), e70160.

Adamik L, et al. (2025) Suboptimal pre-anthesis water status mitigates wheat susceptibility to fusarium head blight and triggers specific metabolic responses. *Scientific reports*, 15(1), 11773.

Ndecky S, et al. (2025) Rice JASMONIC ACID OXIDASES control resting jasmonate metabolism to promote growth and repress basal immune responses. *Plant physiology*, 198(1).

Butcher J, et al. (2025) Microbial bioremediation of persistent organic pollutants in plant tissues provides crop growth promoting liquid fertilizer. *Nature communications*, 16(1), 5768.

Brar MS, et al. (2025) Untargeted metabolomics reveals key metabolites and genes underlying salinity tolerance mechanisms in maize. *The plant genome*, 18(3), e70102.

Klamrak A, et al. (2025) Integrative computational analysis of anti-influenza potential in *Caesalpinia mimosoides* Lamk hydroethanolic extract. *Scientific reports*, 15(1), 3988.

Giannelli G, et al. (2025) Unveiling the root-rhizosphere environment of perennial wheat: a metabolomic perspective. *BMC plant biology*, 25(1), 942.

Marzo CM, et al. (2025) Untargeted metabolomics reveals quinic acid as the kiwifruit component that affects brain activity in mice. *PloS one*, 20(8), e0326134.

Kreuzer I, et al. (2025) Venus flytraps' metabolome analysis discloses the metabolic fate of prey animal foodstock. *The Plant journal : for cell and molecular biology*, 123(3), e70391.