Resource Summary Report

Generated by ASWG on Aug 2, 2026

MaizeGDB

RRID:SCR_006600
Type: Tool

Proper Citation

MaizeGDB (RRID:SCR_006600)

Resource Information

URL: http://www.maizegdb.org

Proper Citation: MaizeGDB (RRID:SCR_006600)

Description: Collection of data related to crop plant and model organism Zea mays. Used to synthesize, display, and provide access to maize genomics and genetics data, prioritizing mutant and phenotype data and tools, structural and genetic map sets, and gene models and to provide support services to the community of maize researchers. Data stored at MaizeGDB was inherited from the MaizeDB and ZmDB projects. Sequence data are from GenBank. Data are searchable by phenotype, traits, Pests, Gel Pattern, and Mutant Images.

Abbreviations: MaizeGDB

Synonyms: Maize Genetics and Genomics Database, MaizeGDB, MaizeGDB Locus

Resource Type: data analysis service, data or information resource, data repository, storage service resource, portal, database, service resource, topical portal, production service resource, analysis service resource, organism-related portal

Defining Citation: PMID:21624896, PMID:18769488, PMID:15888678, PMID:14681441

Keywords: zea mays, corn, model organism, genome, locus, metabolic pathway, genetics, genomics, sequence, gene product, function, literature reference, phenotype, trait, pest, gel pattern, mutant, blast, gene, image, corn, genotype-environment interaction, gene mapping, plant genome mapping, plant genome, gold standard, bio.tools, FASEB list

Funding: USDA ;
USDA/ARS ;
NSF ;
National Corn Growers Association

Availability: Free, Freely available, Acknowledgement requested, The community can contribute to this resource

Resource Name: MaizeGDB

Resource ID: SCR_006600

Alternate IDs: OMICS_01655, biotools:MaizeDIG, nif-0000-03096, r3d100010795

Alternate URLs: https://bio.tools/MaizeDIG, https://doi.org/10.17616/R3V32B

Record Creation Time: 20220129T080237+0000

Record Last Update: 20260801T190310+0000

Ratings and Alerts

No rating or validation information has been found for MaizeGDB.

No alerts have been found for MaizeGDB.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 806 mentions in open access literature.

Listed below are recent publications. The full list is available at ASWG .

Ao J, et al. (2025) Gene mapping and candidate gene analysis of a sorghum sheathed panicle-I mutant. The plant genome, 18(1), e70007.

Yang X, et al. (2025) Novel candidate genes and genetic basis analysis of kernel starch content in tropical maize. BMC plant biology, 25(1), 105.

Huang J, et al. (2025) Model-to-crop conserved NUE Regulons enhance machine learning predictions of nitrogen use efficiency. The Plant cell, 37(5).

Casatejada-Anchel R, et al. (2025) Metabolic engineering of the serine/glycine network as a means to improve the nitrogen content of crops. Plant biotechnology journal, 23(1), 268.

Sullivan A, et al. (2025) 20 years of the Bio-Analytic Resource for Plant Biology. Nucleic acids research, 53(D1), D1576.

Lv D, et al. (2025) Analysis of candidate genes identified via genome-wide association analysis of sugar-related traits in maize kernels. The plant genome, 18(3), e70101.

Uberti A, et al. (2025) Molecular breeding approaches for the improvement of oil content and fatty acid composition in exotic-derived maize germplasm. The New phytologist, 248(4), 1920.

Fang H, et al. (2025) Meta-QTL Analysis and Identification of Candidate Genes Associated with Stalk Lodging in Maize (Zea mays L.). Current issues in molecular biology, 47(10).

Chen H, et al. (2025) Fifteenth century CE Bolivian maize reveals genetic affinities with ancient Peruvian maize. eLife, 14.

Gesteiro N, et al. (2025) Genome-Wide Association Study and Genomic Predictions for Hydroxycinnamate Concentrations in Maize Stover. Journal of agricultural and food chemistry, 73(4), 2289.

Wang X, et al. (2025) Genome-wide identification and functional roles relating to anthocyanin biosynthesis analysis in maize. BMC plant biology, 25(1), 57.

Farid B, et al. (2025) Expression divergence of BAG gene family in maize under heat stress. BMC plant biology, 25(1), 16.

Morais de Sousa S, et al. (2025) Functional genomics and structural insights into maize aldo-keto reductase-4 family: Stress metabolism and substrate specificity in embryos. The Journal of biological chemistry, 301(7), 110404.

Aragón-Raygoza A, et al. (2025) Diverse roles of ethylene in maize growth and development, and its importance in shaping plant architecture. Journal of experimental botany, 76(7), 1854.

Cheng S, et al. (2025) Comparative transcriptome analysis reveals potential regulatory genes involved in the development and strength formation of maize stalks. BMC plant biology, 25(1), 272.

Wang Y, et al. (2025) Integrated metabolome and transcriptome analysis of maize roots response to different degrees of drought stress. BMC plant biology, 25(1), 505.

Xiao Y, et al. (2025) Cloning and function analysis of ZmICE1a, a contributor to the melioration of maize kernel traits. Plant signaling & behavior, 20(1), 2521320.

Dong C, et al. (2025) An InDel insertion in the promoter of a UDP-?-glucuronate 4-epimerase 1 gene enhances maize resistance to Fusarium ear rot. Plant communications, 6(7), 101380.

Liu H, et al. (2025) Maize big embryo 6 reveals roles of plastidial and cytosolic prephenate aminotransferases in seed and plant development. The Plant cell, 37(6).

Jasrotia D, et al. (2025) Identification of QTLs associated with opaque2 modifiers influencing kernel opacity, kernel hardness, and tryptophan content in quality protein maize. Frontiers in plant science, 16, 1553512.