Resource Summary Report

Generated by FDI Lab - SciCrunch.org on May 11, 2025

Plant Genome Resource at JGI

RRID:SCR_005315

Type: Tool

Proper Citation

Plant Genome Resource at JGI (RRID:SCR_005315)

Resource Information

URL: http://genome.jgi.doe.gov/programs/plants/index.jsf

Proper Citation: Plant Genome Resource at JGI (RRID:SCR_005315)

Description: The goal of the DOE JGI Plant Genome Program is to shed light on the fundamental biology of photosynthesis and transduction of solar to chemical energy. Other areas of interest include characterizing: * Ecosystems and the role of terrestrial plants and oceanic phytoplankton-in carbon sequestration. * The role of plants in coping with toxic pollutants in soils by hyper-accumulation and detoxification. * Feedstocks for biofuels, e.g., biodiesel from soybean; cellulosic ethanol from perennial grasses. * The ability to respond to environmental change (e.g., loss of diversity from monoculture produces vulnerabilities; nitrogen fixing nodules in legumes reduce fertilizer need). * The generation of useful secondary metabolites (produced largely for disease resistance)- for positive/negative control in agriculture, with attendant influence on global carbon cycle. The Plant Genome Program accomplishes the above through the following activities: # Sequence. Produce genome sequences of key plant (and algal) species to accelerate biofuel development and understand response to climate change. # Function. Develop datasets (and synthetic biology tools) to elucidate functional elements in plant genomes, with special focus on handful of flagship genomes. # Variation. Characterize natural genomic variation in plants (and their associated microbiomes), and relate to biofuel sustainability and adaptation to climate change. # Integration. Provide a centralized hub for the retrieval and deep integrated analysis of plant genome datasets.

Abbreviations: JGI Plant Genomics Program

Synonyms: Plant Genomics Program at JGI, DOE JGI Plant Genome Program, Plant Genomics Program - Capturing Light to Fuel Our Future

Resource Type: data or information resource, database

Keywords: plant, genomics, genome, photosynthesis, sequence

Funding: DOE

Resource Name: Plant Genome Resource at JGI

Resource ID: SCR_005315

Alternate IDs: nlx_144370

Record Creation Time: 20220129T080229+0000

Record Last Update: 20250507T060309+0000

Ratings and Alerts

No rating or validation information has been found for Plant Genome Resource at JGI.

No alerts have been found for Plant Genome Resource at JGI.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.