Resource Summary Report

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PlantTribes

RRID:SCR_007863
Type: Tool

Proper Citation

PlantTribes (RRID:SCR_007863)

Resource Information

URL: http://fgp.huck.psu.edu/tribedb/index.pl

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Description: It is an objective classification system for plan proteins based on cluster analyses of the inferred proteomes of the sequenced angiospermsArabidopsis thaliana v Columbia, Oryza sativa v. japonica (Rice), and Populus trichocarpa (poplar). Sequence data for Carica papaya and Medicago papaya are also included in the current version of Tribes. Results for these species are currently masked from view, but will be available when the genomes are publicly released. In addition to the genome-based tribe scaffold, unigenes from more than 200 plant and algal species TIGR Transcript Assemblies have been associated with each tribe (see documentation), resulting in a global classification of about 4 million putative plant protein sequences. PlantTribes 1.0 incorporates an extensive collection of microarray expression data from Arabidopsis microarray experiments. Expression data is linked to the individual genes in PlantTribes, and can be accessed through any result including Arabidopsis gene sequences. PlantTribes is based on the similarity-based clustering procedure TribeMCL (Enright et al, 2002,2003) to classify protein-coding genes into putative gene families. MCL classifications have been constructed using three clustering stringencies , allowing the user to explore the stability of the protein classification. A second round of MCL clustering identifies SuperTribes that approximate objective superfamilies. PlantTribes also includes information about domains, traditional gene family names, and a unified nomenclature based on common terms.

Synonyms: PlantTribes

Resource Type: data or information resource, database

Funding:

Resource Name: PlantTribes

Resource ID: SCR_007863

Alternate IDs: nif-0000-03312

Record Creation Time: 20220129T080244+0000

Record Last Update: 20250523T054639+0000

Ratings and Alerts

No rating or validation information has been found for PlantTribes.

No alerts have been found for PlantTribes.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Timilsena PR, et al. (2023) Phylotranscriptomic Analyses of Mycoheterotrophic Monocots Show a Continuum of Convergent Evolutionary Changes in Expressed Nuclear Genes From Three Independent Nonphotosynthetic Lineages. Genome biology and evolution, 15(1).

O'Donnell AJ, et al. (2021) Convergent Biochemical Pathways for Xanthine Alkaloid Production in Plants Evolved from Ancestral Enzymes with Different Catalytic Properties. Molecular biology and evolution, 38(7), 2704.

Cao S, et al. (2020) Characterization of the AP2/ERF Transcription Factor Family and Expression Profiling of DREB Subfamily under Cold and Osmotic Stresses in Ammopiptanthus nanus. Plants (Basel, Switzerland), 9(4).

Goyet V, et al. (2017) Haustorium initiation in the obligate parasitic plant Phelipanche ramosa involves a host-exudated cytokinin signal. Journal of experimental botany, 68(20), 5539.

Conze LL, et al. (2017) Transcriptome profiling of tobacco (Nicotiana tabacum) pollen and pollen tubes. BMC genomics, 18(1), 581.

McCarthy TW, et al. (2014) Phylogenetic analysis of pectin-related gene families in Physcomitrella patens and nine other plant species yields evolutionary insights into cell

walls. BMC plant biology, 14, 79.