About PhyloGenes

PhyloGenes is a web resource that displays pre-computed phylogenetic trees of gene families alongside experimental gene function data to facilitate inference of unknown gene function in plants.

PhyloGenes is maintained by the nonprofit Phoenix Bioinformatics Corporation. It is co-developed by Phoenix Bioinformatics and the PANTHER project at University of Southern California. Its initial development was supported by funding provided by the National Science Foundation (Grant No. DBI-1661543).

Citing PhyloGenes:

PhyloGenes: An online phylogenetics and functional genomics resource for plant gene function inference

Zhang P, Berardini TZ, Ebert D, Li Q, Mi H, Muruganujan A, Prithvi T, Reiser L, Sawant S, Thomas PD, Huala E

Plant Direct. 2020 Dec;4(12):e00293

Current release (version 4.1)

November 15, 2022. We are pleased to announce the PhyloGenes version 4.1 release. *This release updates only the GO annotation data and the publications counts for the gene family members*. The gene families and gene trees are the same as for the PhyloGenes 4.0 release and are still from the PANTHER 17.0 release. Genes from other genomes in the PANTHER build have been removed (pruned). More stats

Updated GO annotations: Experimental gene function annotations were extracted from the Gene Ontology Consortium (files created by PANTHER on 2022-10-27, based on the 2022-07-01 GO release). Phylogenetic inferred gene function annotations were extracted from the GO PAINT project (generated on 2022-09-26, based on the 2022-07-01 GO release which uses PANTHER 15 tree information, downloaded by the PhyloGenes team on 2022-10-20).

Please take a few minutes to share with us your experience of using the PhyloGenes resource.