LegumeIP

RRID:SCR_008906
Type: Tool

Proper Citation

LegumeIP (RRID:SCR_008906)

Resource Information

**URL:** http://plantgrn.noble.org/LegumeIP/

**Proper Citation:** LegumeIP (RRID:SCR_008906)

**Description:** LegumeIP is an integrative database and bioinformatics platform for comparative genomics and transcriptomics to facilitate the study of gene function and genome evolution in legumes, and ultimately to generate molecular based breeding tools to improve quality of crop legumes. LegumeIP currently hosts large-scale genomics and transcriptomics data, including: * Genomic sequences of three model legumes, i.e. Medicago truncatula, Glycine max (soybean) and Lotus japonicus, including two reference plant species, Arabidopsis thaliana and Poplar trichocarpa, with the annotation based on UniProt TrEMBL, InterProScan, Gene Ontology and KEGG databases. LegumeIP covers a total 222,217 protein-coding gene sequences. * Large-scale gene expression data compiled from 104 array hybridizations from L. japonicas, 156 array hybridizations from M. truncatula gene atlas database, and 14 RNA-Seq-based gene expression profiles from G. max on different tissues including four common tissues: Nodule, Flower, Root and Leaf. * Systematic synteny analysis among M. truncatula, G. max, L. japonicus and A. thaliana. * Reconstruction of gene family and gene family-wide phylogenetic analysis across the five hosted species. LegumeIP features comprehensive search and visualization tools to enable the flexible query on gene annotation, gene family, synteny, relative abundance of gene expression.

**Abbreviations:** LegumeIP

**Synonyms:** LegumeIP - An Integrative Platform to Study Gene Function and Genome Evolution in Legumes, LegumeIP: an integrative database for comparative genomics and transcriptomics of model legumes
Resource Type: database, analysis service resource, service resource, data or information resource, production service resource, data analysis service

Defining Citation: PMID:22110036

Keywords: gene function, genome evolution, legume, gene, genome, plant, genomics, transcriptomic, gene annotation, gene family, synteny, gene expression, blast, genomic sequence, microarray, rna-seq, comparative genomics, bio.tools

Funding Agency: Samuel Roberts Noble Foundation, NSF

Resource Name: LegumeIP

Resource ID: SCR_008906

Alternate IDs: nlx_151455, biotools:legumeip

Alternate URLs: https://bio.tools/legumeip

Ratings and Alerts

No rating or validation information has been found for LegumeIP.

No alerts have been found for LegumeIP.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 18 mentions in open access literature.

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


Li J, et al. (2016) LegumeIP 2.0--a platform for the study of gene function and genome evolution in legumes. Nucleic acids research, 44(D1), D1189-94.


