Bioinformatic Solutions in Forest Genomics: Accessing the TreeGenes Database

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http://dendrome.ucdavis.edu

TreeGenes Database
Encompasses Dendrome Resources, DendromePlone, TreeGenes Database & DiversTree

- Nine modules to store and interrelate data for query and analysis in PostgreSQL
  - Direct resource for nearly 2,500 forest geneticists representing 800 organizations worldwide. Over 8,000 unique visitors in December 2013.
    - Forest Geneticists Colleague module
    - Literature module
    - Comparative map module
    - Species module
    - Sequencing/Primers module
    - Genotype/SNP module
    - Gbrowse/Genomic
    - Phenotype/Expression module
    - Sample tracking module

Species Resources
1,286 Species Representing 90 Genus

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Human Resources
2,500 Colleagues Representing 800 Organizations

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Literature Resources
18,952 Publications Related to Forest Genetics

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Transcriptome Resources

Transcriptome Resources for 234 Species

Genetic Maps and Genomes
Implementations from GMOD: CMAP

Individual features and their locations on map
List of features on map

Genetic Maps and Genomes
Implementations from GMOD: GBrowse

Search and Select data source
Tracks can be reordered or hidden as necessary

GMOD Genome Browser
Currently completed tree genomes and annotated P. taeda BACs and Fosmid sequences
Conifer specific proteins

WebApollo on TreeGenes

Accurately track samples through collection, DNA extraction, sequencing and/or genotyping

Forest Tree Genetic Stock Center

Phenotypes, Metadata, Location

Primary Data
Metadata
Phenotype Data

Defining Phenotypes and Environment

Resource Pages

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Forest Tree Genetic Stock Center
Sample Prep and DNA Extraction

Submit to TreeGenes
Genetic Maps, Genotypes, and Phenotypes

Submit to TreeGenes
TG Accession Number for CMAP

DiversiTreet
Resequencing, Genotypes, and Phenotypes
DiversiTree
Resequencing, Genotypes, and Phenotypes

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DiversiTree to CartograTree
Providing Context to Geo-Referenced Data

GenSAS
GENome Sequence Annotation Server

GenSAS
GENome Sequence Annotation Server
More Information

Website: http://dendrome.ucdavis.edu
E-mail: tg-help@ucdavis.edu

Learn More:
TreeGenes Poster: #1008
CartograTree Poster: #1049
SSWAP Workshop: W462 on Tuesday

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