



Arborea releases a gene catalogue for the conifer tree *Picea glauca*

The Arborea project is announcing the release of a gene catalogue for the conifer tree *Picea glauca* (white spruce, of the Pinaceae family). White spruce is a major forest tree species which spans the northern half of the entire North-American continent. It is one of the most widely used by Canada's forest products industry. The gene catalogue represents a major milestone toward full length cDNA sequencing in conifer trees.

The gene catalogue, developed in collaboration with Gydle inc., integrates sequence data sets produced by Arborea (www.arborea.ca) and Treenomix (www.treenomix.ca), two large-scale Genome Canada projects. It is based on 272,172 EST sequences produced from 201,405 cDNA clones coming from 42 libraries. The catalogue, estimated to represent 27,720 different genes, contains the following entities:

- EST sequences, also available in the EST section of Genbank;
- Clone sequences, produced from EST sequences and representing transcript sequences in positive mRNA orientation;
- Clusters are groups of clones representing the same gene. Each cluster has a representative clone.

Each gene cluster is represented by a unique cDNA Clone

Fully sequenced representative cDNAs (FLICs)	23,589
Partially sequenced representative cDNAs	4,131
Total Number of Gene Clusters	27,720

Completed and partial coding sequences (CDS) in representative cDNA Clones

Confirmed complete CDS	4,784
Predicted complete CDS	7,689
Partial CDS	13,747

The data files available in this release contain the following information.

- Cluster representative, cDNA clone and EST sequences (fasta format)
- cDNA clone and EST Cluster contents (csv format)
- Annotations to be released at a later date
- Readme files

Download files at <ftp.gydle.com/pub/arborea>

Related developments: 32K genes oligo-microarray

A whole-genome gene microarray comprised of 70-mer oligonucleotides has been developed jointly by Arborea and Treenomix. Look for information on this microarray on the Arborea website in the near future.

Citation and acknowledgement using this Gene catalogue data

Please acknowledge the use of these data as "Arborea white spruce gene catalogue".

Contacts

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Contribution institutions

The following institutions have participated in this research: Université Laval, Agriculture and Agri-Food Canada, Canadian Forest Service, Centre de Recherche du CHUL, FPInnovations - Paprican, Gydle Inc., Ministère des ressources naturelles et de la faune du Québec, University of Alberta.

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