

# CITRUS GENOME DATABASE



Resources for citrus genomics, genetics, breeding and disease research

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## What is CGD?

CGD is a centralized database containing genomics, genetics, and breeding data and analysis tools for citrus research. Genome sequences are available to view and search and there is also information about genetic maps, molecular markers, and QTL. If you are a breeder who needs to manage private breeding program data, access to the Breeding Information Management System (BIMS) can be requested. Visit us at [www.citrusgenomedb.org](http://www.citrusgenomedb.org) to see everything that is available. Each issue of the newsletter will focus on a different type of data and what features are available.

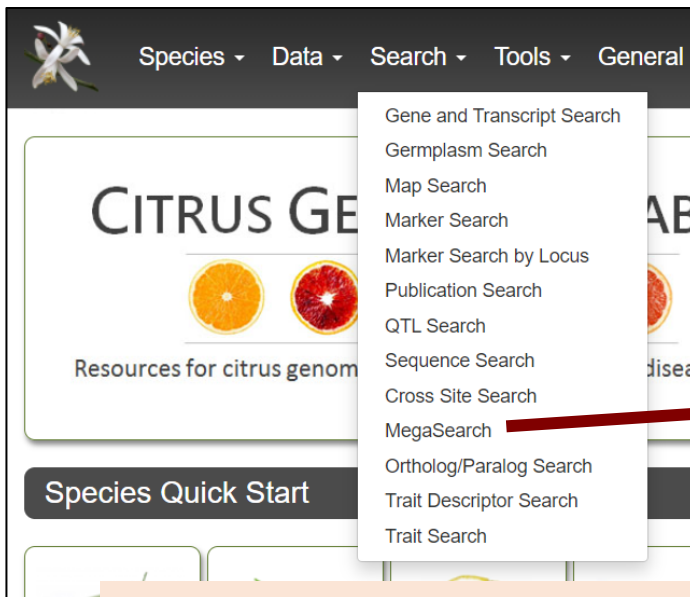
## New CGD search interfaces

A couple years ago, we added [MegaSearch](#) to CGD. MegaSearch was an additional way for users to search the data in CGD and also allowed further refinement to the displayed/downloaded search results over the traditional searches on CGD.

Since MegaSearch works so well, we have decided to transition all searches within CGD to MegaSearch. Not only is this an improvement in database usability, but also helps CGD run more efficiently which will help with performance.

If you have used some of the CGD searches in the past month, you probably noticed a change in the interfaces. We are still working on some of the searches, but MegaSearch is being used for the following data types:

- Genes and Transcripts
- Germplasm
- Genetic Maps
- Genetic Markers
- Publications
- QTL



Either click on the individual data search links, or select MegaSearch to start a search

Data Type	Number of Records	Last Updated
Contact	165	07/26/2021
Gene/Transcript	1142596	06/23/2022
Germplasm	1633	08/04/2021
Map	85	07/14/2022
Marker	60407	06/23/2022
Publication	6747	07/14/2022
QTL	673	10/11/2021

# MegaSearch Interfaces

## Genes and Transcripts

[Watch the video!](#)

1,142,596 Gene/Transcript. *Note: actual rows in downloaded file depend on the selected fields.*

Query

Sequence Type: Any

Downloadable Fields: View FASTA CSV TSV

Genome

Genome Name: Any, Atalantia buxifolia genome v1.0, Ca. L. africanus PTSAPSY genome, Ca. L. americanus Sao Paulo genome

Chromosome/Scaffold: Any

Start: >

Stop: <

Transcriptome/Other Dataset

Transcriptome/Dataset: Any

Organism: Any

Genome: Any

Chromosome/Scaffold: Any

Start: >

Stop: <

Gene/Transcript name

Name: contains

Choose File: No file chosen

## Germplasm

1,633 Germplasm. *Note: actual rows in downloaded file depend on the selected fields.*

Query

Organism: Any, Citrus amblycarpa, Citrus assamensis, Citrus aurantifolia

Germplasm name

Name: contains

Choose File: No file chosen

Accession: contains

Downloadable Fields: All Fields, Name, Unique Name, Organism, Accession, Maternal Parent, Paternal Parent, Pedigree, Country, Publication

## QTL

[Watch the video!](#)

673 QTL. *Note: actual rows in downloaded file depend on the selected fields.*

Query

Type: Any

Organism: Any, Citrus reticulata, Citrus sinensis, Citrus spp.

Trait

Trait Category: Any

Downloadable Fields: All Fields, QTL Name, Trait Name, Organism, Type, Published Symbol, LOD

## Genetic Maps

85 Map. *Note: actual rows in downloaded file depend on the selected fields.*

Query

Organism: Any, Citrus clementina, Citrus grandis, Citrus reshni

Map Name: Any

Mapping population

Population: contains

Maternal Parent: contains

Paternal Parent: contains

QTL

Trait Name: contains

Published Symbol: contains

QTL Label: contains

Publication

Citation: contains

Size

Number of LG: >

Number of Loci: >

60,407 Marker. *Note: actual rows in downloaded file depend on the selected fields.*

Query

Marker Type: Any

Marker Name: contains

Choose File: No file chosen

SNP Array Name: Any

Organism

Mapped in Organism: Any, Citrus clementina, Citrus grandis, Citrus reticulata

Developed in Organism: Any, Citrus aurantifolia, Citrus aurantiifolia, Citrus aurantium

Genome location

Genome: Any

Chromosome/Scaffold: Any

Start: >

## Genetic Markers

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