



GENOME DATABASE FOR VACCINIUM

Genomics, genetics, and breeding resources for blueberry, cranberry, bilberry, and lingonberry research

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What is GDV?

GDV is a centralized database for genomics, genetics, and breeding data and analysis tools for *Vaccinium* sp. 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 a private breeding program data, access to the Breeding Information Management System (BIMS) can be requested through GDV. Visit us at www.vaccinium.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 GDV search interfaces

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

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

If you have used some of the GDV 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

Tripal MegaSearch

Tripal MegaSearch is a tool for downloading biological data. (Current limit per download: video tutorial: 2020 presentation | 2021 tutorial (Gene/Transcript) | 2022 tutorial (QTL))

Select a data type to start building your own query and download data in bulk:

Data Type [Select a Data Type] [Reset]

Data Summary:

Data Type	Number of Records	Last Updated
Contact	29	09/13/2021
Gene/Transcript	2468066	07/10/2022
Germplasm	394	07/14/2022
Map	37	07/14/2022
Marker	227151	07/14/2022
Publication	783	07/14/2022
QTL	465	09/13/2021

MegaSearch Interfaces

Genes and Transcripts
[Watch the video!](#)

Data Type Gene/Transcript Reset
2,468,066 Gene/Transcript. Note: actual rows in downloaded file depend on the selected fields.

Query

Sequence Type Any

Genome

Genome Name Any
Vaccinium caesariense clone W85-20 P0 v2.0 genome sequence
Vaccinium caesariense clone W85-20 P1 v2.0 genome sequence
Vaccinium corymbosum cv. Draper v1.0 genome sequence

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

Data Type Germplasm Reset
394 Germplasm. Note: actual rows in downloaded file depend on the selected fields.

Query

Organism Any
Vaccinium angustifolium
Vaccinium angustifolium x Vaccinium corymbosum
Vaccinium ashel

Germplasm name

Name contains

Choose File No file chosen

Downloadable Fields

- All Fields
- Name
- Unique Name
- Organism
- Accession
- Maternal Parent
- Paternal Parent
- Pedigree

Germplasm

Data Type QTL Reset
465 QTL. Note: actual rows in downloaded file depend on the selected fields.

Query

Type Any

Organism Any
Vaccinium corymbosum
Vaccinium macrocarpon
Vaccinium sp.

Trait

Trait Category Any

Trait Name contains

Downloadable Fields

- All Fields
- QTL Name
- Trait Name
- Organism
- Type
- Published Symbol
- LOD
- R2
- Category
- Map
- Linkage Group

QTL
[Watch the video!](#)

Data Type Map Reset
37 Map. Note: actual rows in downloaded file depend on the selected fields.

Query

Organism Any
Vaccinium corymbosum
Vaccinium macrocarpon
Vaccinium sp.

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 >

Genetic Maps

Data Type Marker Reset
227,151 Marker. Note: actual rows in downloaded file depend on the selected fields.

Query

Note: Some of the SNP positions in the genome are >1 when the alignment was done using flanking sequences.

Marker Type Any

Marker Name contains

Choose File No file chosen

SNP Array Name Any

Organism

Mapped in Organism Any
Vaccinium corymbosum
Vaccinium macrocarpon
Vaccinium sp.

Developed in Organism Any
N/A N/A
Vaccinium ashel
Vaccinium corymbosum

Genome location

Genome Any

Genetic
Markers

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