



Welcome to the first issue of the GDR newsletter in 2016. This biannual newsletter is issued to inform users about new or updated data and features in GDR and community related news. Please feel free to provide feedback and news via https://www.rosaceae.org/contact. The online version can be found at https://www.rosaceae.org/GDR newsletter.

What's new at GDR?

- 1. New genome assemblies and annotations
- 2. New map, marker and QTL data
- 3. New SNP array data from apple are available
- 4. New interfaces to access SSR or SNP genotype data
- 5. Updated species pages
- New summary page to download RNASeq and GBS SRA datasets from NCBI
- 7. New page for publication datasets
- 8. Effort toward improvement of the FieldBook App
- 9. Work in Progress
- 10. Employment opportunities
- 11. Subscription
- 12. Community News

1. New genome assemblies and annotations

First Rubus genome sequence now available for the Rosaceae community - Black raspberry (Rubus occidentalis L.): View assembly in GBrowse/JBrowse, search genes from gene/sequence search page, access assembly with annotations and the GDR functional annotations from the genome page, or access through NCBI BLAST or Batch BLAST tools. Genome assembly and gene annotations provided by VanBuren et al. *Plant Journal* (pending revisions).

2. New map, marker and QTL data

New QTL, markers, genetic map and genotype data have been added to GDR. It includes data from 15 publications: 3 Fragaria, 10 Malus and 2 Prunus. A list of these publications can be found at GDR News item 3/31/16.

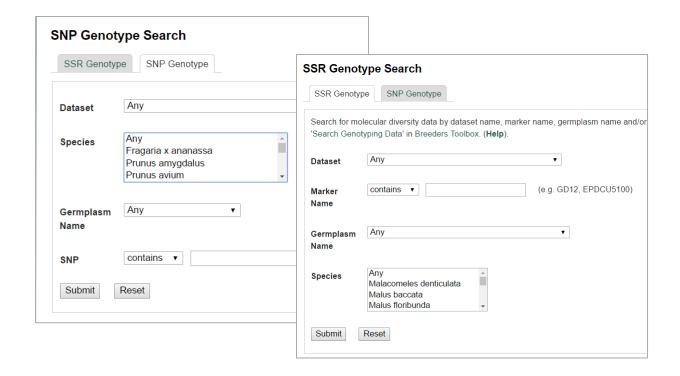
3. New SNP array data from apple

The Axiom(®) Apple480K SNP genotyping array (Bianco et al. 2016)

4. New interfaces to access SSR or SNP genotype data

- SSR genotype search page
- SNP genotype search page

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5. Updated species pages

Species information has been updated by community members (eg. <u>Malus x domestica</u>, <u>Prunus armeniaca</u>, <u>Prunus persica</u>, <u>Fragaria x ananassa</u>). The community members who contributed to the content can be found at <u>GDR News item (3/31/16)</u>.

6. New summary pages to download RNASeg and GBS SRA datasets from NCBI

 View and find download links on GDR to all the <u>RNASeq and GBS SRA</u> datasets available by Rosaceae species at NCBI.

7. New page for publication datasets

 <u>Publication dataset</u> page provides easy access to the datasets that are mentioned to be available from GDR in publications. Data are integrated in GDR and there are various ways to access them.

8. Effort toward improvement of the FieldBook App

We are working with peach breeder Ksenjia Gasic (GDR CoPI) and Jesse Poland's lab to evaluate and suggest improvements to the FieldBook App for electronic recording of Rosaceae breeding data. Handheld tablets with the FieldBook App have been provided to several Rosaceae breeders in the US for evaluation and feedback.

9. Work in Progress

- Upgrading GDR to Tripal2, this will include a new web design. Will be released in June.
- Development of Reference Transcriptomes using published RNASeq and EST data (replaces the Unigene functionality in GDR) for the major Rosaceae species.

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- Addition of more map, marker and QTL data: We are continuously adding more map, marker and QTL data from publications to keep the database up-to-date.
- Modifying the breeder's toolbox to build TripalBIMS to provide a comprehensive breeding information management system for breeders.
- Developing further terms for Trait Ontology to describe Rosaceae traits.
- New synteny analysis using updated genome assembly data.
- Updating PlantCyc databases for current GDR Cycs and creating a RubusCyc.
- Survey of GDR users to obtain feedback on GDR functionality and usability.

10. Employment opportunities

We are currently looking to recruit more programmers for GDR and related work. A very competitive compensation package is available for the right candidates. If you know of any candidates for this job, please have them contact Dorrie Main.

11. Subscription

Visit our mailing lists be added/removed to the available <u>GDR mailing lists</u>. Once you have registered you may use the mailing lists to send out relevant information the community and it will be stored in searchable web archives. More information is available on each page on how to use them. If you have any difficulties please contact us.

12. Community News

Conferences

- <u>Illrd Intenational Symposim</u> on Plum Pox Virus to be held in Antalya, Turkey, May 9-13, 2016
- <u>8th International Rosaceae Genomics Conference</u> to be held in Angers, France in June, 2016.
- Annual Conference of the American Society for Horticultural Science (ASHS) to be held in Atlanta, Georgia, August 8-11, 2016
- <u>IVth International Strawberry Symposium</u> to be held in Quebec City, Canada, August 13-17, 2016
- 4th International Symposium on Markers in Horticulture to be held in Napier, New Zealand, March 7-10, 2016

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