

GENOME DATABASE FOR ROSACEAE



GDR Features:

- MegaSearch for customizable query and download
- Searchable marker, trait, genotype, haplotype, gene, germplasm databases
- Assembled and annotated reference transcriptome (RefTrans) searchable by BLAST
- Synteny viewer to view syntenic regions among all available species
- PathwayCyc of apple, peach, sweet cherry, pear, rose, black raspberry, and strawberry genomes

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Supported by:

USDA National Research Support Project (NRSP10)

USDA NIFA SCRI Award # 2014-51181-2237

NSF PGRP Award # 444573

Washington Tree Fruit Research Commission

Washington State University, Clemson University and
US Land Grant Universities

USDA-ARS

Available Data

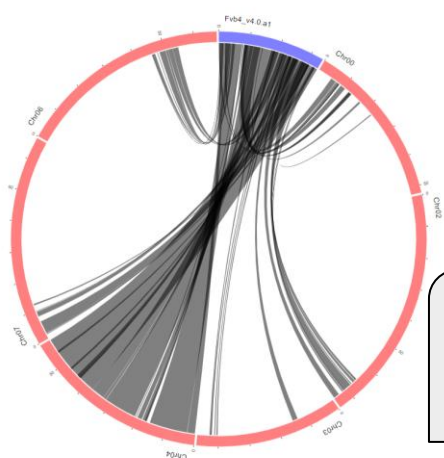
Species	Fragaria	Malus	Prunus	Pyrus	Rosa	Rubus
Markers	171,115	2,614,649	474,869	91,987	74,721	8,743
Maps	29	117	175	23	23	13
QTLs	489	1,528	1,491	15	166	110
Genomes	13	6	9	4	4	3

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www.rosaceae.org

Resources for Rosaceae Research Discovery and Crop Improvement



Synteny viewer for viewing syntenic regions among all available species

Selection	# Data	Max	Min	Mean	STD
Sweet_cherry_CRS_phenotyping_2010	100	13.94	9.40	11.52	0.85
Sweet_cherry_CRS_phenotyping_2011	255	13.78	8.18	11.11	1.13
Sweet_cherry_CRS_phenotyping_2012	354	13.93	8.44	10.97	1.03

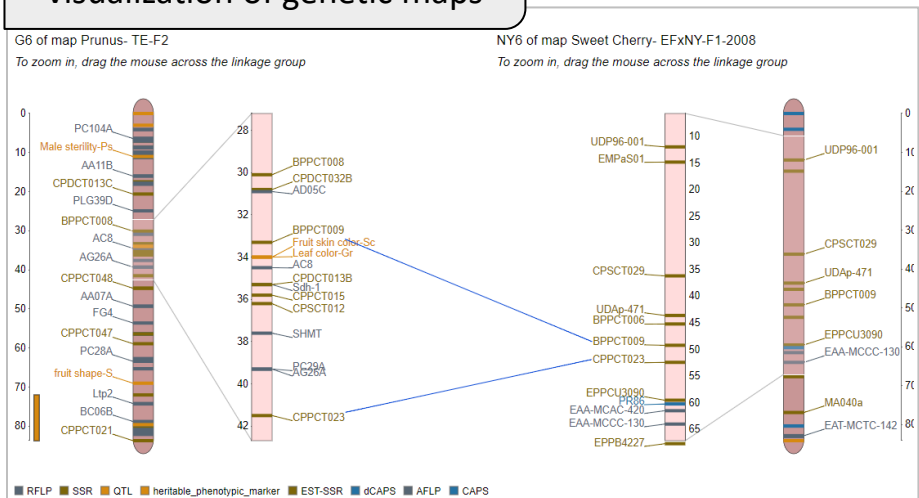
Breeding Information Management System for public/private breeding data

- GDR also has:**
- BLAST tool to search genomes, unigenes, and reference transcriptomes
 - JBrowse tools to view genome annotations including SNP variation
 - Search interfaces for finding marker, map, QTL, genotype, haplotype, phenotype, and sequence data

MegaSearch for customizable query and download

Home page allows for quick access to species specific data and popular tools

MapView for dynamic visualization of genetic maps



3704 records were returned

#	Marker	Location	Allele	ABONDANCE	AMADOU	AMERE NOUVE
41	RosBREEDSNP_SNP_GA_13093630_Lg1_01494_MAF40_470106_exon1	Chr01:17372865..17372865	T/C	AA	AA	NN
42	GDsnp01494	Chr01:17409592..17409592	Y	TT	TT	CC
43	RosBREEDSNP_SNP_TC_13041864_Lg1_01494_MAF50_121937_exon1	Chr01:17424706..17424706	Y	CC	TC	TT
44	RosBREEDSNP_SNP_GA_13037789_Lg1_01494_MAF30_840712_exon1	Chr01:17428781..17428781	A/G	AA	AA	AA
45	RosBREEDSNP_SNP_CT_14001081_Lg1_01889_MAF20_MDP0000824791_exon1	Chr01:18223616..18223616	T/C	TT	TT	TT
46	RosBREEDSNP_SNP_TG_14148062_Lg1_01058_MAF10_1670627_exon2	Chr01:18413404..18413404	T/G	TT	TT	TT
47	GDsnp00703	Chr01:18413404..18413404	T/C	TC	TT	CC
48	RosBREEDSNP_SNP_AG_14148062_Lg1_01058_MAF10_1670627_exon2	Chr01:18413404..18413404	T/C	AG	GG	AA
49	RosBREEDSNP_SNP_GA_14148062_Lg1_01058_MAF10_1670627_exon2	Chr01:18413404..18413404	T/C	AA	GA	AA

Haplotype Block: GR:4:7:13

Marker	Genome location	Map position	a	b	c	d	a	g	h	j	a	m	n	p
RosBREED_snp_tart_cherry_a_Pp4_07398453	Pp04:7398423	LG4:27.11	B	A	B	B	B	B	B	B	B	B	A	A
RosBREED_snp_tart_cherry_a_Pp4_07813828	Pp04:7813881	LG4:28.82	A	B	B	B	A	B	B	A	A	B	A	A
RosBREED_snp_tart_cherry_a_Pp4_07861540	Pp04:7861592	LG4:28.91	B	A	A	A	B	B	A	A	B	B	A	A
RosBREED_snp_tart_cherry_a_Pp4_08495239	Pp04:8506099	LG4:30.45	A	A	B	B	A	A	B	A	A	B	A	B

Search/download tools for genotype and haplotype data