Summary of Citrus Genome Database User Meeting at PAG 2019

Saturday, January 12, 2019

Purpose of Meeting:

Dorrie Main and Jodi Humann from the Citrus Genome Database (CGD, <u>www.citrusgenomedb.org</u>) met with the Citrus community at PAG with two goals:

- 1.) Find out what tools/resources are needed to improve CGD
- 2.) Form a steering committee to guide the development of CGD to ensure it keeps meeting the needs of the community.

Discussion on features/data to add to CGD:

- CGD already has the Citrus resequencing data from Mike Roose (30 samples total) and Albert Wu (8 samples) aligned to the *C. clementin*a genome. Additionally, the community would like to see the rest of the re-seq data from the <u>Genomics of the origin and evolution of Citrus</u> paper added to CGD. Currently, CGD has the aligned reads for 23 of the 60 samples.
- Citrus rootstock phenotype data Enter publically available rootstock data from UF and UCR into the Breeding Information Management System (BIMS) on CGD. This will allow for the data to be under one website and allow the data to be searched by the public.
- Citrus species naming/synonym data Provide this info on CGD. Take information from old booklet and update it (with help from the community), to help track the changes in naming and/or alternate names.
- Correlate gene names from JGI and HZAU *C. sinensis* genomes. Provide a list of the homologous genes and their IDs between the 2 genomes, and cross-reference the gene/mRNA records in the CGD database
- Pedigree data viewer (for modern data), double check pedigrees with SNP data
- Discussed whether CGD should look into implementing functionality for disease triangle interaction type of data. UCD is working on a new database for HLB models. citrusgreening.org already has psyllid data. We will investigate further and look into opportunities to share data with these other databases.

Steering Committee members:

Danelle Seymour UC Riverside
Fred Gmitter UF-CREC
Marco Takita IAC-Brazil
Mikeal Roose UC Riverside

Manuel Talon IVIA

Mikeal Roose will follow up with adding industry representation. Dorrie to provide description of duties for steering committee members