Work Completed

- **New or updated Data**
  - *G. barbadense* 3-79 (AD2_NBI) genome sequence made available on CottonGen JBrowse, includes:
    - Genome sequence Assembly and annotation
    - CottonGen all marker sequence alignments
    - CottonGen unigene v1.0 alignments
    - PlantGDB cotton unigene alignments
    - J. Udall 2012 Unigene contig alignments
    - NCBI cotton dbest sequence alignments
    - Cacao theobroma v1.1 protein homologies and alignments
    - Arabidopsis thaliana TAIR10 protein homologies and alignments
    - Oryza sativa MSU v7.0 protein homologies and alignments
    - Glycine max v1.0 protein homologies and alignments
    - Vitis vinifera protein homologies and alignments
  - **Marker and Maps**
    - Added TAMU CottonSNP63K AD genome intra species map (7,171 loci)
    - Added TAMU CottonSNP63K AD genome inter species map (19,191 loci)
    - Added CSIRO MCU-5 × Siokra 1–4, RIL SNP map (1244 loci and 4 QTLs)
    - Reloaded 40,796 SNP marker data and sequences to fix bug caused by system upgrade
    - Added 10,521 TAMU Gb379 SNPs to chado
    - Added new cotton trait categories to chado
    - Added a new project page for the TAMU Cotton63KSNP Array
    - Added UCD SNP/InDel and TM-1x3-79 map genotype data
    - Added ARS-CS NCGC SSR genotypic data, contains 204,776 genotypic scores from 104 SSRs screened on 1969 germplasm
    - Reloaded UCD SNP/InDel data to fix bug caused by system upgrade
    - Reloaded USDA CFB SNP data to fix bug caused by system upgrade
    - Map/marker/qtl data extracted and curated from 12 publications and added to data templates for upload to CottonGen

- **Tools and Website**
  - CottonCyc
    - Analyzed and added a new CottonCyc patheways for the AD1-BGI genome
    - Updated the D5-JGI CottonCyc pathways by using PathwayTools version 19.5
  - GBrowse_Syn
    - Conducted Synteny analysis between D5-JGI and A2-BGI and made available on GBrowse_Syn
  - JBrowse
    - Fixed problem with the *G. raimondii* JGI protein homology data and updated data on Data Download page
  - Other
    - Fixed the broken link between CottonGen germplasm and USDA-GRIN
Conferences and Presentations
  • Prepared and presented CottonGen at the ICGI 2016 Conference
  • Released the first CottonGen biannual newsletter


Work in Progress and plan in Q3, 2016

• Creating CottonGen reference transcriptome using public RNASeq and EST data
• Continue on the development of CottonGen BIMS to provide better interfaces and also converting to Tripal to share with other databases
• Adding germplasm type to all germplasm in chado
• Adding more map, marker and QTL data: We are continuously adding more map, marker and QTL data from publications to keep up-to-date database.
• Developing further terms for Trait Ontology to describe cotton traits.