

A web-based resource for pea, lentil, faba bean and chickpea genetics, genomics and breeding

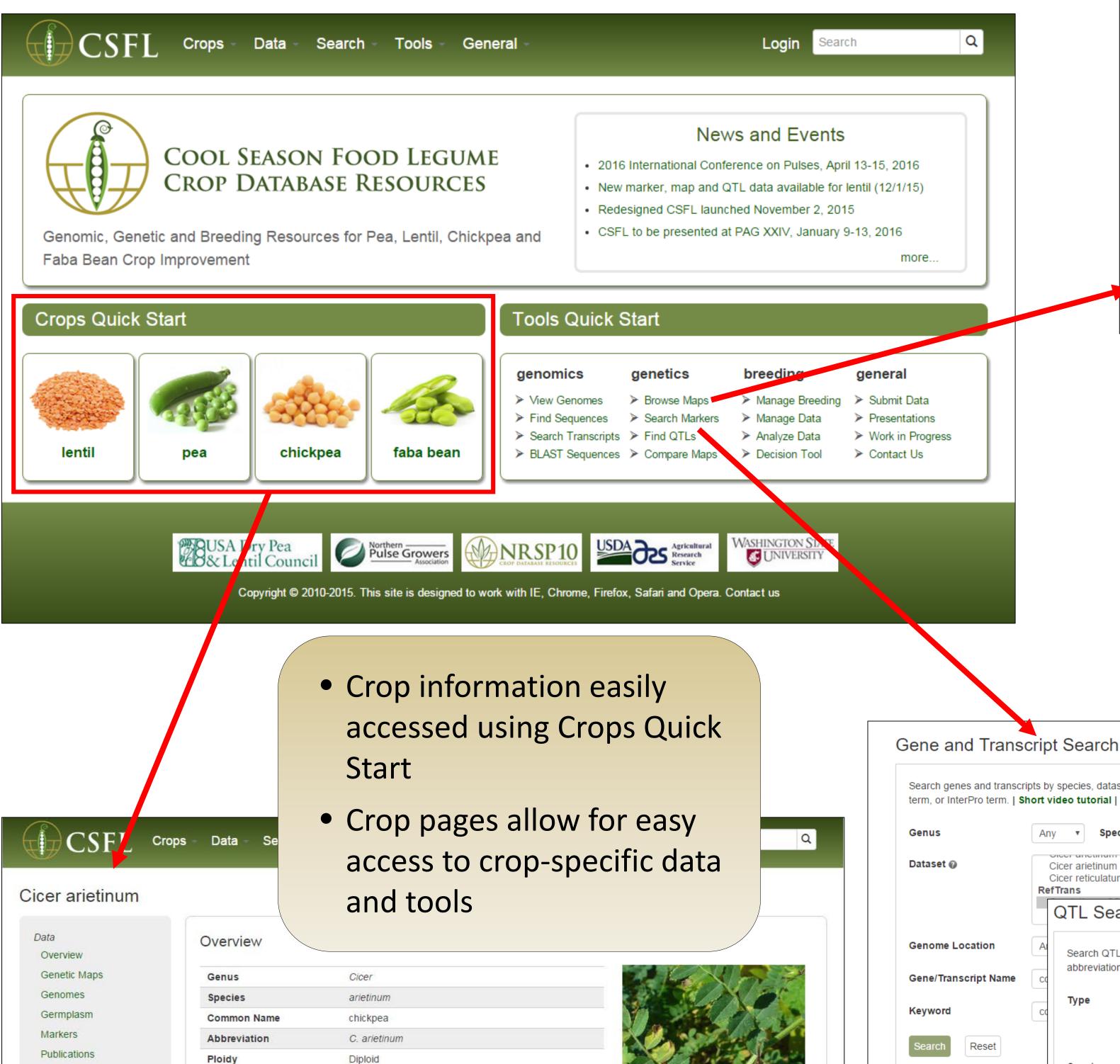
Jodi L. Humann¹, Sook Jung¹, Chun-Huai Cheng¹, Taein Lee¹, Ping Zheng¹, Morgan Frank¹, Deah McGaughey¹, Kristin Scott¹, Katheryn Buble¹, Jing Yu¹, Heidi Hough¹, Clare Coyne², Rebecca McGee², Dorrie Main¹

> ¹Washington State University, Pullman, WA; ²USDA-ARS, Pullman, WA Contact info: jhumann@wsu.edu, dorrie@wsu.edu

www.coolseasonfoodlegume.org

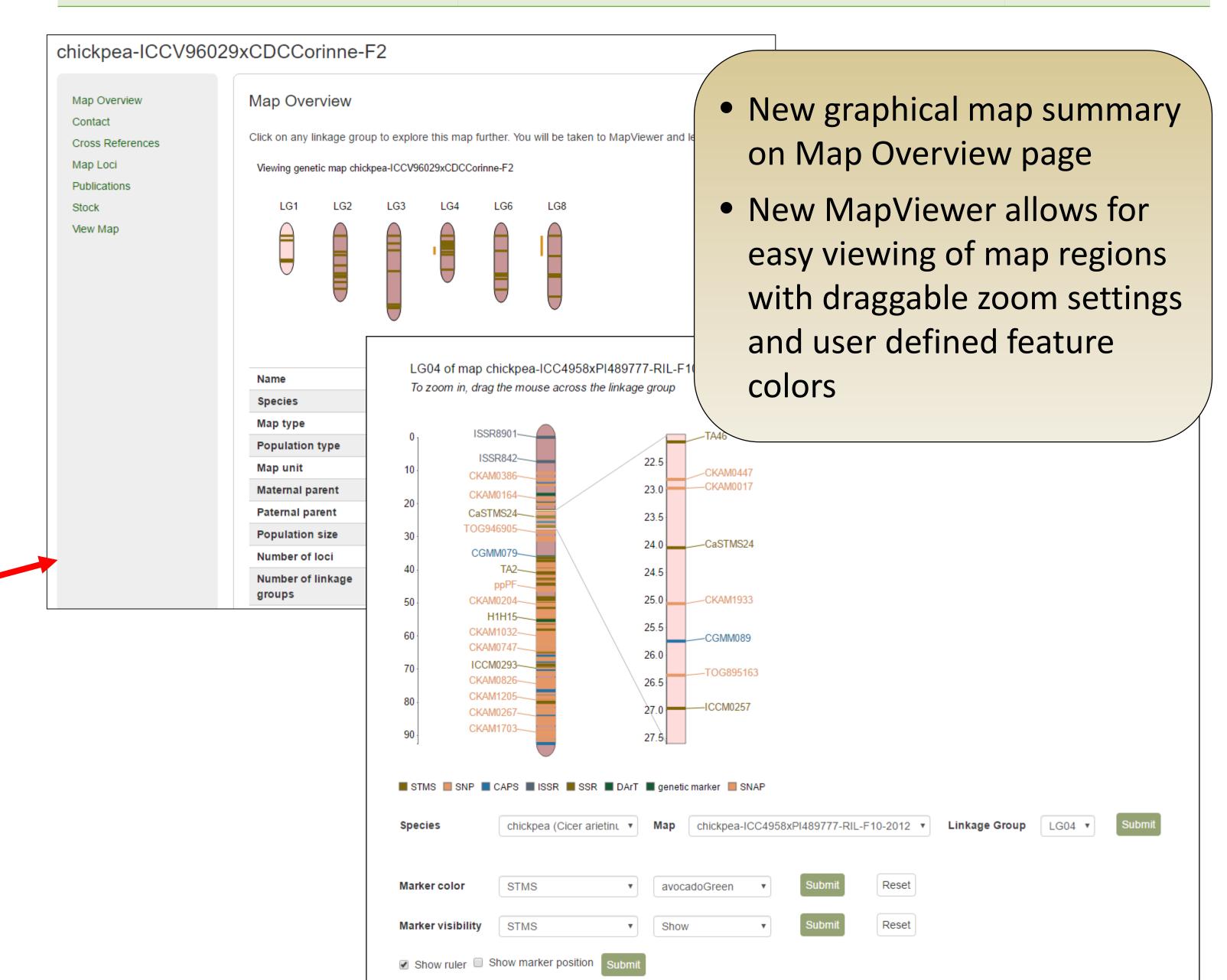
Abstract

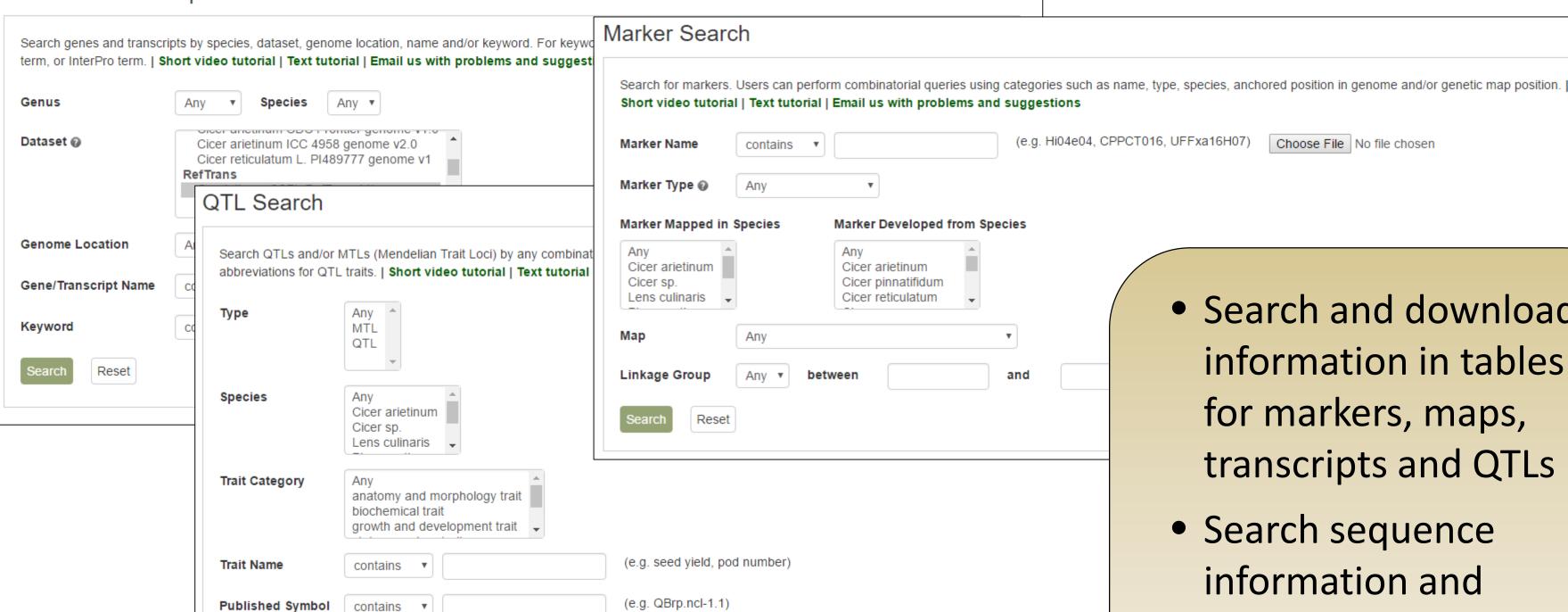
The Cool Season Food Legume Genome database (CSFL) is a resource for genomics, genetics, and breeding research for chickpea, lentil, pea, and faba bean. Curated QTL, marker and genetic map data from the current literature is regularly added, easily searchable and can be retrieved as downloadable tables and files. The database also has several tools for data exploration including BLAST for searching genome sequences and reference transcripts (RefTrans) generated by analysis of published RNASeq data, JBrowse for viewing genomes and the corresponding annotations or alignments, and PlantCyc for viewing predicted metabolic pathways in genomes. In addition to the comparative map viewer CMap, CSFL features a new TripalMap genetic MapViewer. TripalMap is a new Tripal module that pulls data from the CSFL Chado database and integrates the maps into the CSFL genetic map details pages.



Data in CSFL

Available Resources	Pea	Lentil	Chickpea	Faba Bean
Markers	7,041	50,058	54,442	3,431
Genetic Maps	28	18	42	17
QTLs	820	150	514	210
RefTrans Transcripts	45,727	33,936	50,864	69,784
Genomes	0	0	3	0





- Search and download information in tables for markers, maps, transcripts and QTLs
- Search sequence information and download in Excel and FASTA formats

Funding provided by





Reset



(e.g. qBPL.JG62xVijay.LG1.III)



Thanks to



Chromosome Number

Genome Size

Available Markers

Available Maps

Available QTLs

Available Traits

Available Genomes

Trait Loci

BLAST

KEGG

PathwayCyc

2n=16

~740 Mbp

31,060

502