





July 2023

Welcome to the 3rd issue of the CottonGen newsletter in 2023. This newsletter is issued to inform users about **new or updated data and tools in CottonGen**. In addition to new and updated data, each issue will provide more information on data or tools on **the featured tools/data** section.

New tutorial videos available

Two short tutorials, "Learn how to use MegaSearch for Gene and Transcripts" and "Learn how to search traits and see all the linked data" were made available. See the manual page or our YouTube channel for more.

BIMS Workshop at NAPB 2023!

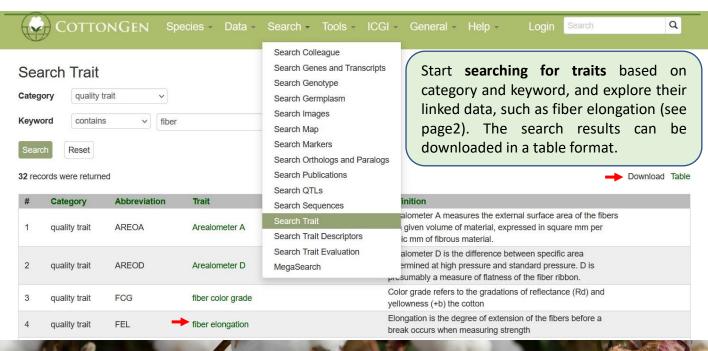
We had a successful BIMS workshop at NAPB 2023 (July 16-20, Greenville, SC)! Thank you for those who participated! The presentations for each section of workshop including the use case demo is available at the presentations page in breedwithbims.org. Recordings will also be available when they are released.

New Data & Tools

 CottonGen Functional Analysis (InterProScan and KEGG, Protein Homologies, Cottongen Marker and RefTran Alignments, etc.) added to three genomes (Ref. Peng, Xu, etc., 2022):

G. hirsutum (AD1) 'TX-1000' CRI_v1
G. ekmanianum (AD6) 'AD602' CRI_v1
G. stephensii (AD7) 'AD701' CRI_v1

- 2123 GWAS data (100 based on 16 agronomic traits of 215 germplasm on A2-CRI genome and 2023 based on 43 root traits of 200 germplasm on AD1-NBI genome)
- Over 25.8K phenotype scores of 43 root traits collected on the 200 germplasm from the Henan Anyang, China in the year of 2020





QTLs





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Featured Data and Tools

Search Traits and See Linked Data - continue

By clicking on a trait from the search result table, you can view detailed information and access various types of data associated with the trait.

Trait Overview
Descriptors
QTLs/MTLs
Dataset
Publications

Trait Overview Descriptors	Trait Overvie	Fiber Elongation			
QTLs/MTL	Trait	fiber elongation			
Dataset	Trait Category	quality trait			
Publications	Abbreviation	FEL			
	Definition	Elongation is the degree of extension of the fibers before a break occurs when measuring strength			
	Descriptors	[view all 8]			
	QTLs	[view all 671]			

QTL/MTL	Linkage Group	Peak	Start	Stop	Dataset	MapViewer
qFEL.0s-RIL_ch03-1.ay10.1	AD_ch03_At.03	0.01	-	11.5	0S-RIL-2016	View
qFEL.0s-RIL_ch03-1.ay10.2	AD_ch03_At.03	26.71	11.5	28.9	0S-RIL-2016	View
qFEL.0s-RIL_ch04.ay10	AD_ch04_At.04	59.6	48.7	59.6	0S-RIL-2016	View
qFEL.0s-RIL_ch04.ay13.1	AD_ch04_At.04	75.11	73.6	76.2	0S-RIL-2016	View
qFEL.0s-RIL_ch04.ay13.2	AD_ch04_At.04	84.31	83.3	88.3	0S-RIL-2016	View
gFEL.0s-RIL ch04.av13.3	AD ch04 At.04	88.3	86.9	88.3	0S-RIL-2016	View

Year	Publication
2022	Gowda SA, Katageri IS, Patil RS genetic mapping and QTL analys
2019	Kumar NVM, Katageri IS, Gowda analysis for fibre quality and yield
2019	Deng X, Gong J, Liu A, Shi Y, Go across multiple generations in se
2018	Diouf L, Magwanga RO, Gong W in an Intra-Specific Upland Cotto 01; 19(2).
2018	Huang C, Shen C, Wen T, Gao E cotton using an eight-way MAGI
2018	Jia X, Wang H, Pang C, Ma Q, S specific Gossypium hirsutum L. r
2018	Tan Z, Zhang Z, Sun X, Li Q, Sun Map Construction and Fiber Qua 2018; 9:225.
2018	Li C, Yu H, Li C, Zhao T, Dong Y, Analysis for Fiber Quality Traits



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