



Welcome to the 2nd issue of the CottonGen newsletter in 2024. 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 in **the featured tools/data** section.

What's New in CottonGen?

Short video tutorial

- [How to find a marker associated with a trait](#). (2:30mins)
- [Downloading markers from a map region](#). (2:12mins)

New Genome Data/Functional Analysis

New whole genomes and predicted genes available with CottonGen Functional Analysis (InterProScan, Protein, Homologies, and Synteny Analysis) added to the genome of:

- [Gossypium hirsutum \(AD1\) 'YM11' genome XAAS v1 \(Wang et al, 2024\)](#)
- [Gossypium barbadense \(AD2\) 'Gb M210936' genome HAU v1 \(Wang et al., 2023\)](#)
- [Gossypium hirsutum \(AD1\) 'HPF17' genome ZJU v1 \(Cheng et al. 2023\)](#)

Other New or updated Data

- 3641 missing primers were added to the 8704_NAU-SSR_dataset

CottonCyc updates

Five wild species (2 tetraploids and 3 diploids) added and G.hirsutum Cyc updated in [CottonCyc](#):

- [Gossypium hirsutum \(AD1\) 'TM-1' genome UTX v2.1 \(Chen et al., 2020\)](#)
- [Gossypium ekmanianum \(AD6\) 'AD602' genome CRI v1 \(Peng et al., 2022\)](#)
- [Gossypium stephensii \(AD7\) 'AD701' genome CRI v1 \(Peng et al., 2022\)](#)
- [Gossypium anomalum \(B1\) B1 genome HAU v1 \(Wang et al., 2022\)](#)
- [Gossypium stocksii \(E1\) E1 genome HAU v1 \(Wang et al., 2022\)](#)
- [Gossypium bickii \(G1\) G1 genome JZU v1 \(Sheng et al., 2022\)](#)

Search Genotype

Search SNP Genotype is a page where users can search for the search for SSR Genotype. | [Text tutorial](#) | [Email us with problem](#)

Dataset: Any

Species: Any

Germplasm Name: Any (Browse... No file selected)

SNP: contains []

Genome: Any

Chr/Scaffold: Any between [] and [] bp

Gene Model: [] +/- [] bp

Search [] Reset []

Genotype Searches

Search SNP Genotype can be accessed through the Search menu in the header. The page opens with SNP as the default tab followed by the SSR tab. Users can search SNP genotype data by dataset name, marker name, germplasm name, and/or species.



Genotype Searches - *continue*

Search Genotype

SNP Genotype SSR Genotype

Click on the arrow here, you will see the list of available SNP dataset names

Select a dataset, and the species and germplasm contained within it will be listed (see the two arrows).

Search SNP Genotype is a page where users can search for the SNP genotype. Search for SSR Genotype. | [Text tutorial](#) | [Email us with problems and](#)

Dataset: Any

Species: Any
 CCRI CG_SNP_genotype_2016
 TAMU_SNP63K_genotype
 TN-RIL (F:9) SNP genotype
 UCD_SNP_genotype_2009

Germplasm Name: UCD_SNP_T3-RIL_genotype_2009
 USDA_CFB_SNP_genotype
 USDA_SNP63K_PD_genotype_2021

SNP: contains

Genome: Any

Chr/Scaffold: Any between and

Dataset: TAMU_SNP63K_genotype

Species: Any
 Gossypium arboreum
 Gossypium arboreum x thurberi [polyploid]
 Gossypium armourianum

Germplasm Name: Any
 08-WZ-51 (AH-405, Hague)
 2880
 30819

SNP: contains

Genome: Any

Chr/Scaffold: Any between and bp

Dataset: TAMU_SNP63K_genotype

Species: Gossypium armourianum
 Gossypium barbadense
 Gossypium ekmanianum
 Gossypium hirsutum

Germplasm Name: 2880
 320F (PI 529233)
 3-79
 4383

SNP: contains

Genome: Any

Chr/Scaffold: Any between and bp

Gene Model: +/- bp

Both species and germplasm can be multi-selected by holding the 'ctrl' and clicking (as shown in grey background). The 'Browse' button allow user to provide a list of germplasm names, too, as long as the list of germplasm within the selected dataset.

63056 records were returned

[Download Table](#) | [Table \(Polymorphic\)](#)

#	Array ID	Marker	Location	Allele	3-79	320F (PI 529233)	Acala 1517 (New Mexico)	Deltapine 90	Deltapine 90 (IW-081, Wilson)	Deltapine 90 (IW-160, Wilson)	Deltapine 90 (IW-349, Wilson)	Dixie Triumph
21	I48454Gh	TAMU_GH_TBr313P071130	A01:629120..629220	T/C	T	T	C	C	C	C	C	T
22	I69889Gf	TAMU_GI_136482	A01:632498..632598	A/G	G	G	G	G	G	G	G	G
23	I66594Ca	TAMU_Arm_077986	A01:840597..840697	T/C	T	T	T	T	T	T	T	T
24	I55260Cb	TAMU_Gb379_018552	A01:854876..654976	A/G	G	A	A	A	A	A	A	A
25	I53303Cb	TAMU_Gb379_016834	A01:700408..700508	T/C	C	T	T	T	T	T	T	T
26	I85543Gm	TAMU_Mus_018545	A01:724719..724819	A/G	G	G	G	G	G	G	G	G
27	I49493Ch	DOW_DASCOT_1_1	A01:775412..775496	A/G	G	A	A	A	A	A	A	A
28	I54060Gb	TAMU_Gb379_003814	A01:787475..787575	A/C	C	A	A	A	A	A	A	A
29	I53296Cb	TAMU_Gb379_016741	A01:824298..824398	A/C	C	A	A	A	A	A	A	A
30	I69097Gf	TAMU_GI_036680	A01:831339..831439	T/C	T	T	T	T	T	T	T	T
31	I54788Gb	TAMU_Gb379_012357	A01:871646..871746	T/C	C	T	T	T	T	T	T	T
32	I61676Gf	TAMU_Tom_018348	A01:901179..901279	A/G	G	G	G	G	G	G	G	G

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Funded by:
Cotton Inc.; USDA-ARS; NIFA; Bayer CS; CORTEVA;
USDA National Research Project (NRSP10)