



**As we close out 2024 and look forward to 2025, we are excited to reflect on the progress made last year and share updates from the SorghumBase community. Thank you to all our contributors, collaborators, and subscribers for your continued support!**

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## 2024 Highlights

- **Community Growth:** This year, we welcomed 166 new subscribers to our mailing list, expanding our community of researchers, educators, and enthusiasts.
- **Improved Interoperability:** Working with GRIN and other germplasm repositories has enabled a new Germplasm tab in the gene search. This interface gives users convenient access to accessions with predicted loss-of-function mutations.
- **Database Expansion:** We added 232 new research papers to the SorghumBase database, along with 36 research highlights. Our collection of funded projects now holds 340 research projects. These additions ensure our users stay informed about the latest advancements in sorghum research.
- **New Resources:**
  - **Video Demos:** As part of the EBI Plant Genomes 2024 training workshop, we created 10 short video demonstrations showcasing the features of the SorghumBase/Gramene gene search interface. These are now available on the [SorghumBase YouTube channel](#).
  - **Website Releases:**
    - **March (Release 7):** Enhanced user interface features, including germplasm and sequences tabs.
    - **October (Release 8):** Introduction of curated exPVP genomes.

- **December (pre-release 9):** New genomes, updated comparative genomic analyses, updates to curated gene models and search functionality.
  - **Sorghum Community Marker Panel:** Worked with the US sorghum community to develop a commercially available 2.4K Sorghum Community Marker Panel supported by Agriplex Genomics focused on domestic breeding needs.
- **Collaborations and Working Groups:**
  - **Sorghum Breeders WG:** Led by Vivek Kumar, this working group comprises a targeted group of domestic sorghum breeders and researchers to accelerate adoption of breeding programs.
  - **Sorghum Genomes WG:** Co-led by Nick Gladman and Kapeel Chougule, this group has identified a diverse set of agronomically important genomes to assemble, annotate and integrate into Sorghumbase.
  - **SAP Phenotyping WG:** Under Marcela's lead, this group is beginning to take shape, with a focus on phenotyping standards and practices.
  - **AgBio Phenotyping Data Management WG:** Nick Gladman is contributing to this group's efforts to understand the phenotyping needs of life sciences, focusing on data types, standards, and community adoption of FAIR practices.
  - **AgBio Single-Cell Biocuration WG:** Co-chaired by Sunita Kumari and Chris Tuggle, this group addresses challenges in annotating scRNAseq metadata in plants and animals. They aim to identify bottlenecks and establish recommendations for dataset management.

Kapoor, M., et al. (2024). "Building a FAIR data ecosystem for incorporating Single-Cell Genomics data into agricultural G2P research." *Frontiers in Genetics*. [Read the paper](#).

- **AgBio Standards for Genetic Variation WG:** Marcela K. Tello-Ruiz, in collaboration with Timothy Cezard of the European Variation Archive, co-leads efforts to harmonize and promote interoperability of genetic variation data across platforms.

## Looking Ahead to 2025

**We are enthusiastic about the year ahead and our goals for 2025:**

- **Conferences:** We are looking forward to meeting up with some of you in the first part of the year at the Sorghum and Millet Workshop during the [PAG](#) Conference, the [Maize Genetics Meeting](#) and [AGBT-Ag](#)!
- **Single-Cell Research Workshop:** In March 2025, we will host an in-person workshop at AGBT-Ag in Orlando, FL. This event will focus on identifying resources needed for effective single-cell research in agriculture, advancing FAIR data practices, and fostering a cohesive community around scRNAseq datasets.

Thank you for being part of the SorghumBase community. We look forward to another year of growth, discovery, and collaboration!

**Best wishes for 2025,  
The SorghumBase Team**