

GrainGenes: A Centralized Nexus for Small Grains Data and Communities

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O&A session

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The webinar recording is available on the IWGSC YouTube channel at: https://youtu.be/GPQw58qyzZo

Q: Will vertical farming solve this problem?

The type of specific farming methods to ensure global food security is an important question but beyond my expertise.

Q: Is there a database of mapped QTL associated with different traits in wheat? If no, are you planning to have this in the future?

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GrainGenes has currently 8422 QTL records overall. There is another database called WheatQTLdb that may be helpful to find QTLs that are not available in GrainGenes.

Q: Is there any Unique feature of Grain Genes that other websites don't have?

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Q: Has anybody created a Student Practical Class based around the amazing GrainGenes resources? It would include questions for the students to explore and answer, gaining familiarity with the type of data there. Maybe finding polymorphisms for some trait linked to a gene, then finding markers, and suitable germplasm. Such a practical could work very well.

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Q: The Chez Panisse example is really helpful ó can you use this metaphor to help me understand how T3 and GrainGenes interact?

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Q: Do you know if there is an updated way to connect MapDisto QTL intervals directly with GrainGenes browsers?

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Q: Is there any room for doing parts of research in your laboratory/can you support the sequencing of barley genotypes?

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Q: Can we use your these techniques also in other plants?

Absolutely. The methods I showed during the presentation are applicable for other species as well.

Q: I am wondering if the IWGSC Refseq V2 has complete protein information which may be useful for proteomics data analysis in wheat?

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Q: Is network modelers available for wheat genome??

Some networks, such as gene expression, protein-protein interaction etc, are available for wheat. But more research is needed.