Arabidopsis Databases at the Scottish Crop Research Institute (SCRI)

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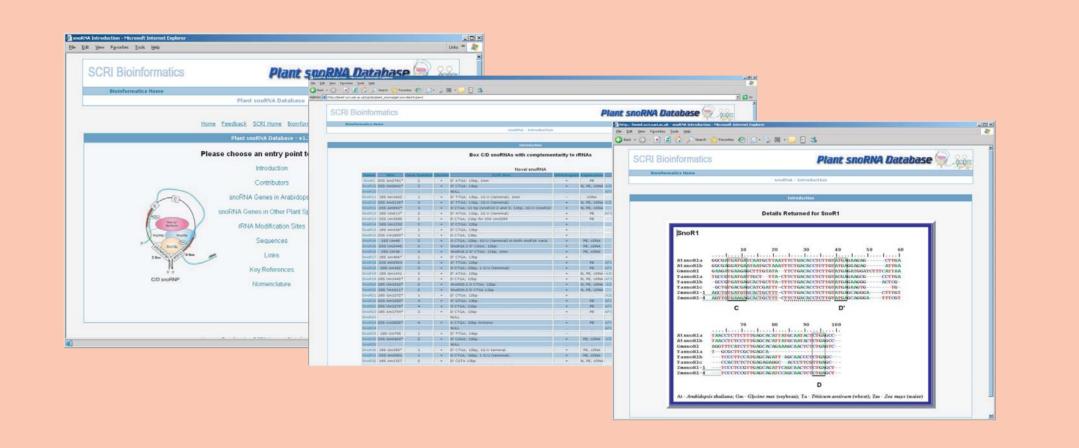
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At the Scottish Crop Research Institute (SCRI) we are developing an integrated and modular set of databases both to directly support our research & to integrate our internal research infrastructure with external informatics resources. These databases are based on Open Source software tools such as Perl, Apache, MySQL and PostgreSQL running on either Linux or Unix servers and are accesible though simple web-browser based interfaces. We have begun work to provide access to most of our informatics resources through SOAP-based webservices.

We now have a series of domain targeted databases for Arabidopsis available at http://bioinf.scri.sari.ac.uk/.

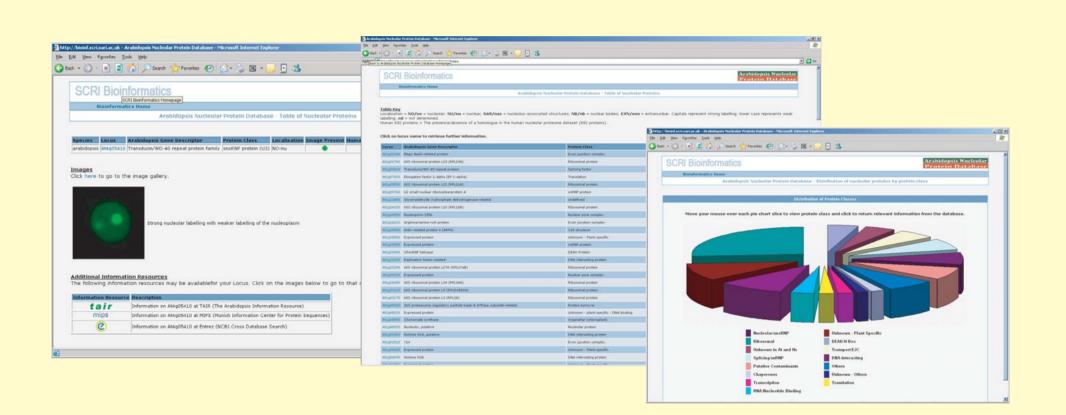
PlantSnoRNADB

PlantSnoRNADB has been developed in collaboration with Dr John Brown of the Gene Expression Programme at SCRI and encapsulates information about snoRNA genes in Arabidopsis and related plant species. We are currently updating the information it contains to take account of new information from rice and plant ESTs



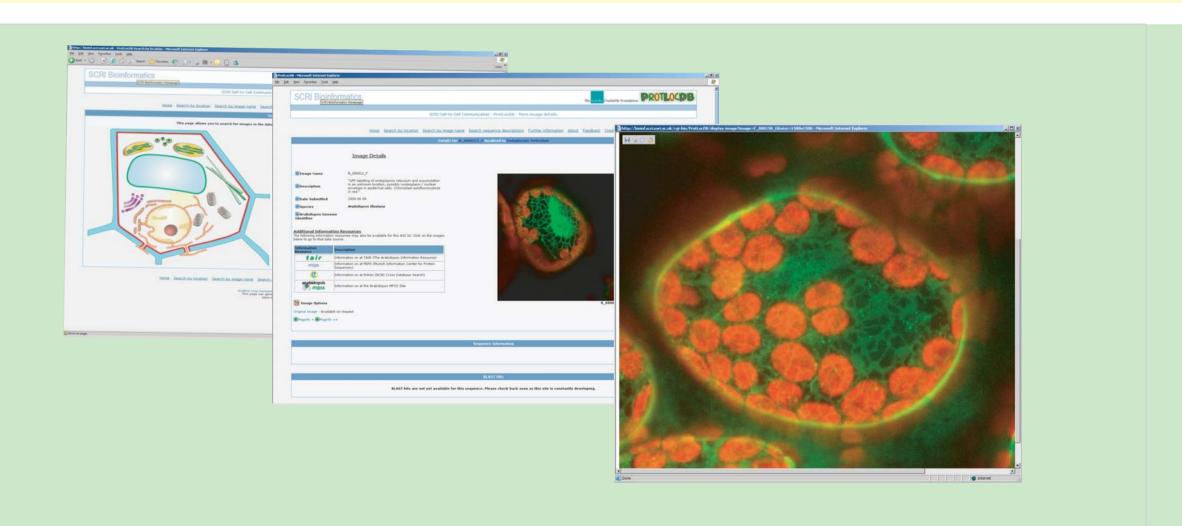
AtNOPDB

AtNOPDB is a project database which focuses on the nucleolar proteome of Arabidopsis together with comparative information with the yeast and human nucleolar proteome. This is collaboration with Dr John Brown from SCRI and Dr Peter Shaw's group at JIC.



ProtlocDB

ProtlocDB has been developed in collaboration with Prof Karl Oparka of the Cell-Cell Communication Programme at SCRI (now at the University of Edinburgh) to support a high throughput protein localisation project in Arabidopsis and Nicotiana based on GFP/Viral Vector constructs. It contains both high resolution confocal images and supporting data.

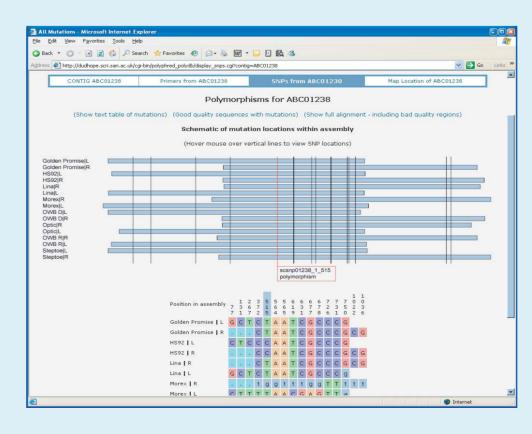


Cereal informatics resources and software will shortly be available from SCRI at http://germinate.scri.ac.uk/barley. These include informatics for barley SNP and SSR development and mapping, barley TILLING & mutant populations, genotype databases and visualisation software and a wheat high throughput in situ database.

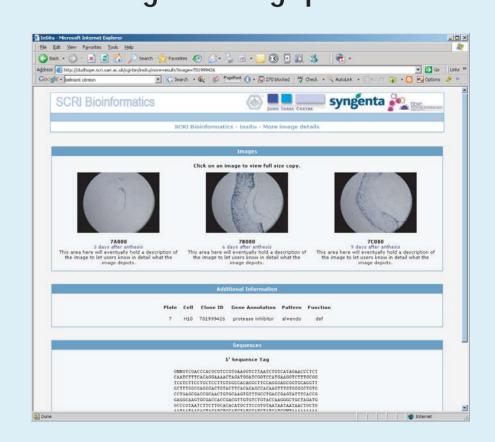
GVT - Graphical Genotyping Software



SNPDB Barley SNP Database



Wheat high throughput InsituDB



Acknowledgements

We acknowledge the financial support of SEERAD and the BBSRC and the collaboration of colleagues both at SCRI and in other organisations in the UK, Europe and across the world.

The Plant Bioinformatics Group at SCRI has considerable experience in comparative mapping and sequence analysis and we welcome collaborations with research groups wishing to integrate work on model organisms with the rapidly developing sequence and mapping resources available in cereal and Solanaceous crops.