

VeGIN Meeting 14th March 2011

Vicky, Rosemary, Fran, John Ca., Graham, Sarah, Charlotte, Mariateresa, Andy, Jay, John W., Adam, John Cl., Guy, Peter, Paul, Dave

Stakeholders Meeting 4th April

Delegates – Jeanette has list of who has been asked, who responded

55? registered so far, many external – growers and industry

Now advertised on University news and events

Farhana invited from DEFRA, none from BBSRC (Crop Club people) - ***Vicky to rustle up others if possible.***

Welcome - Rosemary introduces the day and Crop Centre

Provide delegates with 4 documents to take away:

Crop Centre Flier – Rosemary, Vegin output flier – Graham to produce, glossary – Peter, new technology flier – Guy to produce. Also programme

Graham to introduce the project and key terminology and summary of what the project outputs will be

Web Site

Peter reported new 'glossary' pages on website – ***Peter/Jay to make open to whole group for checking***

Peter to prepare simple glossary to print out for delegates

Mapped SNP info should be on website – ***Graham/Guy to check data and make available to be posted. Not SNP map positions?***

Need a page listing the project's outputs – ***Graham to prepare material, Peter/Jay to put on site***

Tilling population details should be on website – ***Peter to check***

Status of DFFSs: Brassica and lettuce – we can provide a few seeds at a time at replacement cost as lines fixed. Carrot and onion - cannot but can refer interested people to the original source of the founder lines. ***Graham to prepare price/conditions statement for website?***

Also need to sort provision of DNA (Judith Irwin).

Most important is to keep a record of all seed and DNA that have been sent out.

Annual Report

Due end March, no extension possible – ***deadline for providing contributions to Vicky this Friday***

Lettuce:

Rosemary: Lettuce - first rep. seed didn't germinate very well – talked to Andrew and Dave and got new design so can use material, but milestone delayed. Next rep now germinated with much better germination rates – dormancy broken by refrigeration - possibly.

Peter putting together lines that have no/ low seed numbers (15 lines)

Peter should take a leaf sample from each plant raised to compare in case seed accession came from several plants, and should be genomified

Dave's list of Lettuce DFS –***Graham/Peter to send to him for annotation so can be posted on website***

For lettuce used CGN core selector and merged with previous list. 24 from genebank here, published in paper. ***Graham to coordinate the list.***

TILLING:

Paul waiting for cost from JI for mutant load assays (using FT primers). If too expensive could do more limited set and/or ask Steve J to contribute – **time scale from Paul.**

Possibility to set up our own TILLING pipeline, if it is not too expensive? RevGenUK will provide training **Paul and Peter to explore.**

ESTs:

Lettuce map; Laura has integrated with Michelmore, one of milestones – is done. Peter got list of candidates from Laura's thesis. ***Pete to contact her again in case she has useful info to contribute.***

Paul provided Peter with Nitrate candidates these can be added to the gene list.

Lettuce SNPs:

Iceberg sequenced well – 3 lanes, Saladin didn't – genomic sequence will be repeated – probably in about a month's time when transcriptome sequencing done. Might be worth contacting Richard to ask whether we can use their genomic sequence to align to. Probably not as different line??

Immediate – sequence transcriptome of both Saladin and Iceberg - range of tissues and treatments including post harvest. ***Fran to finish RNA extraction from Saladin and Iceberg lettuce***

Peter will identify SNPs candidates for a new lettuce chip. Include about 30 SNPs that fall in candidate genes. Also SNPs for other ESTs?

The chip will be used to screen the mapping population. The new data will be integrated into the existing map

Time frame 3-6 months to allow inclusion in Laura's paper

Brassica

Need to define the background of each line in B.o and wild C DFS

C-genome list choice was pragmatic – what germinated from the genebank – Dave has Birmingham MSc which describes locations of collections etc.

B. oleracea's some were John's.

All passport data is available from genebank providing we have genebank accession number – for Brassica we have it. ***Graham to put list together and give to Dave to fill any gaps.***

Rosemary's resistance tests will be done using S1s - some old DH lines generated which were tested previously – would be useful to include them in Rosemary's test as controls - macrocarpa, incarna, cretaca (all x Senna). ***Rosemary to let Graham know which accessions used, Graham to get seed.***

Any resistance identified in S1 lines can be checked in corresponding fixed lines to see if it has been captured.

Brassica SNPs:

Have resequence data from TO1000, GD33, Mar34 and EarlyBig

Have assembled sequence of TO1000 but we are not confident of scaffolds

Jay will Map ESTs to scaffolds and enrich chosen SNPs for EST-based SNPs

Enrich for ones on scaffolds that don't have existing markers but are long

Enrich for SNPs between TO1000/EarlyBig and GD33/A12 (Mar34)

Peter to identify SNPs between GD33 and Mar34

Look towards creating a broccoli SNP chip that includes common SNPs used for AG population

Integrate AG and MG maps

Additional activities

Pacific Biosystem sequencing of Brassica parents (incl MAR34) and iceberg. **Guy to sort this out**