**Minutes of the OREGIN Management Meeting**

21st of February 2019

University of Warwick

Present:

ADAS: Kate Storer (**KS**)

AHDB: Catherine Garman (**CG**)

DEFRA: Martin Cannell (**MC**),

Elsoms: Mark Nightingale (**MN**)

NIAB: Tom Wood (**TW**)

Rothamsted Research: Jon West (**JW**)

University of Hertfordshire: Bruce Fitt (**BF**)

University of Nottingham: Rory Hayden (**RH**)

University of York: Ian Bancroft (**IB**), Lenka Havlickova (**LH**)

University of Warwick: Graham Teakle (**GT**)

Apologies: ADAS: Pete Berry (**PB**); AHDB: Dhan Bhandari (**DB**); DEFRA: Andrew Cuthbertson (**AC**); Rothamsted Research: Frederic Beaudoin (**FB**); University of Hertfordshire: Yongju Huang (**YJH**), Heather Fell (**HF**), University of Nottingham: Neil Graham (**NG**); University of Reading: John Hammond (**JH**); University of York: Roxana Teodor (**RT**)

Organiser: **GT** (UoW), **RT** (UoY)

Chair: **IB**

Minutes: **LH**

**IB** opens the meeting, offers the apologies for the missing members.

**Actions from the previous minutes:** AP15, AP17, AP23, AP25, AP26, AP28, AP29, AP30, AP31 and AP32 successfully done. Action points will be re-numbered from 1.

**Project management and administrative matters** (Ian Bancroft (**IB**); Kate Storer (**KS**); Martin Cannell (**MC**); Graham Teakle (**GT**); Jon West (**JW**); Bruce Fitt (**BF**))

**IB** raised up the nutritional quality project and asked who will give updates on it. **KS** is happy to provide updates and **MC** will cover his part too.

**IB** – collaboration agreement: confirmation from 1 subcontractor that contract has been signed – didn’t hear anything since then, does it mean that it has been done? Does anyone know how is the current situation? **GT**, **KS, JW** got a copy and it looks like it should be OK, GT – Warwick suggested minor amendments.

**IB** all looks in place, we have to sort the things for DEFRA.

**MC** – A new government structure has been in place before the GINs research advisory group (RAG) meetings. RAG membership includes BBSRC, AHDB, couple other experts, they are meeting on 6-monthly basis meeting for updates. Last meeting was ~3 weeks ago. RAG assessed that there is excellent communication between stakeholders during the stakeholders forum’s annual meeting at the end of the year. AHDB assessed that their audience was very pleased with the OREGIN stakeholders meeting, presentations were well pitched.

Research advisory group recommended that we use social media to promote the projects, maybe via a Twitter account? RAG recognize that it takes time and effort, but this will be a good opportunity to use Twitter to promote work of Genetic Improvement Networks (GINs), including up to date website, which are easy to navigate.

**CG:** AHDB happy to be involved with monitoring strategic farm, potential route to navigate to the strategic farms and monitor farms for that purpose.

**MC:** There is general interest from the RAG about whether the GINs are aware of the opportunities for joint working or engagement with wider international repositories when it comes to sharing genomic/phenotypic data.y. The GINs are aware of the issue internationally with regard of sharing genomics data. **IB** – trait data is a bit of an issue, with difficulties with the BIP; but we are uploading the trait data on the OREGIN website. Genomic data is all publicly available on the York knowledge base.

**MC** mentioned that it would be important that members of the different GINs know that they are free to attend different meetings such as VeGIN, WGIN etc., that there are no barriers, it could be useful and provide useful information across fertilization ideas etc. **IB** - please feel free to attend any other GINs. **MN**: Elsoms is attending, **GT**: Elsoms is also part of VeGIN, we also have this connection across the two GINs. Do we know the dates of other GINs? **LH,** can we put it on the OREGIN website?

**AP01:** **MC to send the list of GIN stakeholders meetings to LH/RT and IB.**

**IB** - GIN related publications captured and send to DEFRA; still collating list of all GIN related publications. If anyone is planning to publish any paper resulting from OREGIN (or other GINs) work, they have to go to DEFRA before publication, and DEFRA need to proof it for IP purposes (Andy Cuthbertson or Martin Cannell). Is anyone planning a publication? **JW** may have some publication, **BF** may have some publication too, but not sure how much they are relevant to OREGIN.

**Updates on work programmes of OREGIN 5**

**WP1.1 Direct interactions between stakeholders and academic project partners. Activity throughout; Milestones 1, 5, 15, 20, 33, 38, 56, 62, 76, 81, 87**

**WP1.2 Facilitated interactions between stakeholders and the wider academic community. Activity throughout; Milestones 3, 9, 17, 27, 36, 49, 59, 69, 78, 86**

(Ian Bancroft (**IB**); Catherine Garman (**CG**); Martin Cannell (**MC**); Graham Teakle (**GT**), Mark Nightingale (**MN**); Kate Storer (**KS**))

**IB** we should start to think about the next OREGIN Stakeholders meeting after the positive feedback from the last one – it should be driven by stakeholders – it’s shame that Vasilis is not present for discussion. Mark, do you have idea which kind of feedback or AHDB (**CG**) could give some idea about what and who can organise it next time? UoY will provide administrative support. **MC** maybe it could be something on insects? **IB, GT** we did that couple of years ago. **GT** pointed out that the insects interaction changed due to the withdrawal of neonicotinoid seed treatments this year, so it could be interesting. **IB** mentioned possibility to focus on agrochemical perspectives? **MN** – it would be interesting and some people could give interesting talks. **IB** - Other option could be biostimulants, biopesticides. **KS:** alternative integrated management? **MN** can give a talk on what they are doing with the seeds, stimulant work, there is a limited chemistry for seed treatments, so maybe biostimulants; could offer talk on that. **IB**: AHDB, Elsoms, Limagrain to organise something like that? Who will take part? Can you do it jointly, Roxana will help with organising it.

**AP02: MN and KS to liaise with RT and organise biostimulant stakeholder forum Sept-Oct- in Elsoms (JW: 10-11 September to be avoided).**

**WP2.1 Maintain and make available for cost-recovered distribution core pathogen sets. Activity throughout; Milestone 13, 31, 54, 74, 91** (Ian Bancroft (**IB**); Bruce Fitt (**BF**); Mark Nightingale (**MN**); Jon West (**JW**);

**IB**: no response from Fiona Burnett about the clubroot – anyone in contact with her? None reported. Bruce, any updates? **BF**: update on stem canker: we have 2 pathogens: *L. maculans* 24 international isolates, 80 UK isolates; *L. biglobosa* 6 international isolates and 11 UK isolates. For *Pyrenopeziza brassicae* - 124 international isolates and 140 UK isolates. Resistance genes identified, cloned, more AVR genes. Related work from other project showed that the resistance of resistance gene *Rlm7,* widely used in cultivars is increasing and we are monitoring it. **MN:** have you noticed phoma this year in your material? General proportion is higher and reasonably uniform. **BF** – not from official trials, **JW** – is phoma present on the old leaves, before winter? You have it usually on the old leaves as an artefact - getting lesions that could actually be resistance (cell death). **MN** – true, but in the past we didn’t see this reaction.

**BF** – we have done some work on the OREGIN website as well.

**WP2.2 Maintain and make available for cost-recovered distribution *B. napus* DFFS lines. Activity throughout; Milestones 14, 23, 32, 55, 75, 92**. (Graham Teakle (**GT**); Rory Hayden (**RH**) Ian Bancroft (**IB**))

**GT**: 9 plants being selfed, another 35 lines being bulked up, distributed some accessions for RNAseq and to **RH** for bulking.

**AP03**: **IB to chase the RNA data from Oxford.**

**WP2.3 Amplify panel of reference *B. napus* varieties for trialling. Activity in months 9-44; Milestones 21, 40, 63**

**RH**: the panel grows nicely, vernalisation was OK. **IB** These are lines for the first field trial, which will be sown in 2019/20.

**WP3.2 Develop pre-breeding lines from exotic *B. napus* and spring oilseed rape. Activity in months 3-44; Milestones 6, 24, 41, 45, 64**

**WP3.3 Develop pre-breeding lines from mutagenized populations. Activity in months 3-44; Milestones 7, 25, 42, 46, 65**

**WP3.4 Develop pre-breeding lines from alien introgression material. Activity in months 3-44; Milestones 8, 26, 43, 47, 66** (Lenka Havlickova (**LH**))

**LH** gives talk on WP3.2, WP3.3 and WP3.4

**WP3.5 Develop pre-breeding F1 hybrids between winter and spring oilseed rape. Activity in months 1-32; Milestones 22, 39** (Ian Bancroft (**IB**); Martin Cannell (**MC**))

**IB**: Vasilis still plans to do F1 hybrids, but not as part of the OREGIN project.

**MC**: it would be nice to get a copy of today’s talks.

**AP04:** **LH/RT to circulate the presentations to the management panel and send them to Jamie Stone, to be uploaded on the OREGIN webpage.**

**WP4.1 Establishment, management and phenotyping of field trials** (Kate Storer (KS); Lenka Havlickova (LH); Roxana Teodor (RT); Mark Nightingale (MN); Rory Hayden (RH); Ian Bancroft (IB); Tom West (TW)).

**KS:** 2019-2020 field trials, 4 reps, it’s not pre-breeding, but only newly fixed DFFS lines - more than 44. Varieties being bulked 2019 ref 30. General discussion about contamination with Erucic Acid (EA) content in lines resulting in decision that ***LH/RT to send MN the list of lines for which we have EA content data.***

**AP05**: **LH/RT to send MN the list of lines for which we have EA content data.**

2020-2021: 14 varieties, 53-54 varieties - 30 recurrent + 24 DFFS lines. **RH**: variety ‘New Hakuran’ – we didn’t get enough seeds and therefore there will be not enough bulked seeds. **IB**: these are newly fixed ones – if they won’t be a problem, forget them, we can’t afford to waste our time on them. But Cabriolet must be included in each trial*.*

**AP06: IB to send original spreadsheet to everyone to capture experimental design etc.**

**IB**: plans for 2019-2020 site. Are there enough lines, seed availability, what kind of measurements are being planned? **MN**: it will depend on location, soil quality and accessibility, water lodging etc. **KS**: are there any requests for site location? **MN**: Bridlington is a very good location, good soil, yield… **KS**: in terms of traits to measure, we are thinking about the roots. **IB:** you will probably come with a list of traits you would like to validate. For the new pre-breeding lines, we will be focusing on the specific traits for which the lines were selected, but in the first year just testing general traits. **MN**: any specific requirements to use for Associative Transcriptomics (AT), etc.? **IB**: there are not enough lines for AT, so what it can do is give us more of an idea on how robust and reproducible the data is during the years. **IB** to **TW:** are you happy with situation? **TW**: yes. Mark has made the suggestion of Bridlington based on soil moisture content. **MN** asking **KS:** how do you want take the root samples – core it? **KS**: with 90cm deep tool for collecting them.

**AOB** (Martin Cannell (**MC**); Ian Bancroft (**IB**); Kate Storer (**KS**); Roxana Teodor (**RT**))

**MC**: Given the changes in amount of seed and number of lines, will these cause any issues for costs? **IB** – some new lines will not get trialled either because they don’t perform well, or we will not have seeds. We are expecting to fulfil the plan for approximately 20 lines.

**IB**: Nutritional quality project - contracts late, everyone started late, but surveys has been done, next stage is analysing. **KS**: lot of people have been contacted, crushers, supermarkets, consumers… not as excited about the idea as we would have thought, but we got some feedback and results. Now everything is back with Roxana. We have also sent a review on nutritional aspects. **IB**: mentioned there is interaction between Cargill and his team at UoY and Fred Beaudoin (RRes). **IB**: back to the survey - we can quantify the responses, some of them may be off the wall, but we got some useful response. It would be interesting what they think about the omega3 FA. End of March is the deadline for the nutritional project. We will need to invoice before the end of March to stay within the financial year. Putting through an actual grant proposal will take some time to go through the UoY internal approval system. **IB** to **MC** – not sure if you need full proposal – **MC** to confirm if it should be actual proposal or not(signing by everyone in department, setting up subcontracts, etc.).

**AP07: MC to confirm if the nutrition proposal should be a new project proposal, or an example of how the grant proposal would be written.**

**Date for next meeting:** will be in the form of teleconference July 31st at 10:00-12:00 – ***all participate in organizing teleconference***

**AP08: RT to set up teleconference call for 31st July at 10:00-12:00**