

UK Plant Genetic Resources Group Meeting
DATE & TIME: Wednesday 16th October 2024, 11:00-15:00
LOCATION: Horizon House, Deanery Road, Bristol, BS1 5AH and online

Nigel Maxted, Univ. of Birmingham (NM) (**Chair**)
Gaynor McKenzie, James Hutton Institute (GM)
Elizabeth Scott, NIAB (LS)
Matt Ordidge, Univ. of Reading (MO)
Kalani Seymour, Plant Heritage (KS)
Catrina Fenton, Garden Organic (CF)
Caroline Liddell, Defra (CL)
Lydia McKenzie, Defra (LM)
Solomy Kaweesi, Defra (SK)
Charlotte Allender, Univ. of Warwick (CHA)

Joe Taylor, JNCC (JT)
Noam Chayut, John Innes Centre (NC)
Sharon Balding, Kew Gardens (SB)
Chris Barker, Defra (CB)
Sean May, Univ. of Nottingham (SM)
Sarah Trinder, Univ. Warwick (ST)
Felicidad Fernandez, NIAB (FF)
Lin Huang, Aberystwyth University (LH)
Debbie Kessell, SASA (DK)

24/22 Apologies

The meeting was chaired by Nigel Maxted (NM).

Apologies received from Lydia Smith, Gwen Hines, Abigail Johnson, James Armitage and Dr Frances Gawthrop.

24/23 Minutes of the meeting held on 4th July 2024 (NM)

KS raised the following addition to the AOB section of the July 2024 minutes:

The RHS (Royal Horticultural Society), National Trust, National Trust for Scotland and English Heritage are working together on updating and checking plant names so that it will be easier to know what is grown overall in UK gardens and landscapes.

24/24 Actions and Matters arising (NM)

The following actions from previous meetings were raised:

Item 23/28: Review of Terms of reference and group invite list

- Action LS: to follow up with Anthony Hopkins at BSPB

NM queried whether LS has contacted Anthony Hopkins. LS clarified there was confusion regarding whether she would continue to contact Anthony Hopkins since his participation in Defra's Plant Treaty interest group and confirmed she will continue to contact Anthony Hopkins.

Item 24/13: Actions and Matters arising

NM contacted Science and Advice for Scottish Agriculture (SASA) to arrange a fixed representative to attend the group. DK will be attending UKPGRG meetings on behalf of SASA and will be UKPGRG's point of contact with SASA until a fixed representative has been appointed.

NM contacted Agri-Food and Biosciences Institute (AFBI) and did not receive a response. Defra also contacted AFBI and has not received a response. Defra have a contact at the Department for Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland, and offered to reach out to them for contacts within AFBI. LS has contacts at AFBI and will provide their information to NM via email.

NEW ACTION: LS to send contacts at AFBI to NM via email following this meeting.

Item 24/14: ProWild Horizon – Europe

NEW ACTION: NM to reach out to NC about collaboration between Defra-funded CWR inventory and ProWild Horizon project.

24/25 PGR indicator Europe (JT)

JT from the Joint Nature Conservation Committee (JNCC) presented the current PGR indicator based on a paper circulated prior to the meeting on the development of the UK Biodiversity Indicator on Plant Genetic Resources (UK BioPGR). JT requested feedback on the following questions, as well as currently available data and leads for new data:

- Are data available on how the holdings of genebanks are changing year-on-year, e.g. data on the loss of samples?
- Are data available on how genetic samples from genebanks are utilised?
- Do UK genebanks in general have suitable databases of their holdings to inform this indicator?
- How could the indicator be developed to best inform GBF targets and the SDG indicator?

The following feedback was provided:

- The previous indicator does not clarify what material has been lost from the genebanks' collections.
- A concern was raised over the indicator's cumulative presentation of data ,
- Loss of material from genebanks needs to be presented in the correct context.
- The importance of clarity on what is being measured was highlighted.
- The members of the UKPGRG were highlighted as a main source of PGR conservation, also noting that other data sources are available.
- Clarification was sought on whether there was a requirement for the data included in this project to be recorded on EURISCO, advising that if this a requirement then it needs to be communicated to all involved.
- The taxon list was queried. A request was made for the list to be recirculated amongst the group. Previously, the UKPGRG stated that the taxon list should be widened and not restricted.
- It was queried whether data from Plant Heritage's National Plant Collections (PH) was included in this project, as they have around 485 separate locations, more than 90,000 accessions and over 700 focused collections, most on a single database. If the data from PH has not been included, a request was made for the reason why these resources have not been included. It was noted that PH, a charity, collect data but do not have the resources to analyse it completely.
- It was highlighted that Botanic Gardens Conservation International are not represented within the UKPGRG, but for cultivars Plant Heritage's Threatened Plants Programme holds more data for their members than they have done, and also for many PlantNetwork (who declined to join) members, such as hundreds of botanic and historic gardens across the UK and Ireland.
- Data on utilisation and number of accessions that have been obtained is available through standard material transfer agreement (SMTA) order records.
- Regarding tracking utilisation, breeders typically provide little information back to UKVGB following ordering however researchers usually produce and publish papers which is a potentially trackable metric.

- There are different contexts to loss such as in terms of decline and in terms of health. One example is an accession taken out to be regenerated that is found dead which may not be realised for decades due to limited resources.
- Cultivar uniqueness in a global context was highlighted, for example genebanks may hold species that are recorded on the IUCN Red List.
- The inclusion of cultivated species and wild relatives in one indicator could have negative implications due to the different approaches they require. JT noted that goals of the Convention on Biological Diversity incorporate wild and domesticated diversity.
- NM noted that an indicator would be very useful, however not in its current form.

JT clarified the next stage of the development of the indicator is to include some new development analyses to refine the question. JT will present new analyses and refined questions relating to the indicator at the next UKPGRG meeting on 12 March 2025.

ACTION: *Secretariat to add the UK BioPGR to the next UKPGRG meeting's agenda.*

24/26 EC funding initiative (CB)

CB presented a summary of his paper that provided an update on Horizon Europe Cluster 6 and EU Framework Programme 10. The group was asked to consider whether there are any priority areas for topics or topic proposals for the Cluster 6 2026-27 work programme, which the UK could put forward through the Programme Committee for consideration.

MO suggested the Programme Committee consider previously made calls, after highlighting the number of calls that have scored highly but were not accepted. Oversubscription rates of the number of proposals submitted to calls versus the amount of available funding for each call was discussed, and CB highlighted that the Committee are aware of this issue.

LS queried whether general further feedback is available on the type of proposal that the Committee is looking for. CB confirmed that this level of detail is not available to the Committee as independent evaluators review the submissions and report to the Committee.

The UKPGRG providing feedback was discussed. CB confirmed that we (UK) would be looking for specific and high-level suggestions to help inform the Committee to develop work programme topics. In the discussion of topic ideas submitted by members of the European Cooperative Programme for Plant Genetic Resources' (ECPGR) crop wild relative working group, CB recommended that members of the working group can speak with their country representatives on the Cluster 6 Programme Committee as this could add more weight to inform the Commission's thinking and work programme development.

NM noted that the group would like to hear information on upcoming UK sources of funding prior to their publication. CB noted that there is another team within the Central Science Division at Defra that focuses on UK partnerships and links to funding supported by UK Research and Innovation (UKRI). He offered to reach out to a colleague that may be able to present to the group.

24/27 Landrace varieties fees (NM)

NM has been contacted by a LR seller impacted by (i) the fees to add new plant varieties to the national list and (ii) limited purchasers. The seller queried whether there is a way to reduce the fees and promote small companies to continue selling LR.

CF queried whether the sales are listed under the lower rate for conservation/amateur variety, as legislation has been introduced that added another layer to these tariff fees. The fees include admin and APHA related costs.

CF queried whether APHA or Defra are responsible for setting the fees. CF clarified that Garden Organic identify plant varieties that drop off the national listing.

DK clarified that more information would be needed to confirm who is responsible.

ACTION: NM and DK to follow up on the matter outside of the meeting

24/28 In situ data submitted to EURISCO (LH)

LH demonstrated the trial inclusion of in-situ crop wild relative data in EURISCO, using sites with good CWR data to demonstrate (namely Ainsdale Sand Dunes and Ingleborough). In-situ data recorded in EURISCO should have an available ex-situ sample with the holding institute of this sample also listed to enable access. The aim is for EURISCO to include data on in-situ material that is actively managed even if material is not immediately available. An ex-situ sample should be made available at a later date and the two listings should be linked.

24/29 Genebank Network (NC)

The Biotechnology and Biological Science Research Council (BBSRC) provides funding to establish collaborative research networks to resolve a research problem. NC highlighted that the UK's approach to genebanking is decentralised compared to other European countries which impedes data utilisation. An application has been submitted to the BBSRC Network Grant: Responsive Mode 2024 Round 3 to establish a UK Plant Genetic Resources Network aimed towards addressing this issue with a focus on germplasm data management. Results will be available in April 2025. The proposed network is to be co-directed by NC, CA, LS, MO, Paul Shaw, SB and SM.

NM asked how the proposed network will add to a crop wild relative and landraces national inventories that the University of Birmingham are currently developing. NC confirmed the network's aim is to enhance currently available resources using bottom-up data, rather than duplicating data or replacing resources.

NM queried the benefit of having the national inventories and a database by the network. NC clarified that (i) the national inventories have finite funding, and (ii) the data in the network's database would have a different function; noting that the two resources may complement each other in the future.

Following discussion of similarities between data going into EURISCO and the national inventories, LH queried how the data going into EURISCO can be diversified.

SM highlighted that for collections that are not publicly visible, the conflation between the holder of seeds and the holder of data needs to be avoided so the holder of seeds do not lose their branding.

NC highlighted that the network can increase visibility of the available data, making it more useful than the data alone.

ACTION: BBRSC Network application to be updated on at the UKPGRG summer technical meeting in Summer 2025.

24/30 NEW AEGIS (LM/MO/CA/NC)

LM presented an update from a kick-off meeting for a new project from the ECPGR. The project called 'New AEGIS' has been funded until February 2025 by the German Federal Ministry of Food and Agriculture, with an aim to strengthen the existing project 'A European Genebank Integrated System' (AEGIS). AEGIS is a regional collaboration to establish a system aimed at conserving important accessions for Europe and making them available for breeding and research. New AEGIS provides compensation for the completion of tasks that are mandatory elements of AEGIS or support the aims of AEGIS. New AEGIS is aimed at Associate Members (AM) of AEGIS. AM are institutions that are identified by each ECPGR National Coordinator, located within the applicable nation and have signed and returned the membership agreement. Defra is the UK National Coordinator for the ECPGR and the current Associate Members in the UK are the 3 Defra-funded national genebanks.

CA highlighted a potential concern that the creation of multiple manuals by individual genebanks would require each genebank to work to large numbers of different standards.

24/31 Defra Update (CL)

The working group for the International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA) to enhance the functioning of the Multilateral System (MLS) met in September 2024. Member states were largely in agreement on the package of measures relating to the enhancement of the MLS, which are:

- The expansion of Annex I of the ITPGRFA to include all PGRFA
- Subscription based payment structure
- The inclusion of Digital Sequence Information (DSI).

However, there was no consensus on a subscription only mechanism, so the Working Group agreed to consider an alternative subscription mechanism as proposed by the Co-Chairs containing a dual trigger for mandatory benefit-sharing payments: an early trigger upon registration, or a deferred trigger at the point of commercialization.

Defra has an interest group for the development of the MLS measures. CL invited interested members of the UKPGRG to contact her to join the interest group.

ACTION: UKPGRG members to email CL at Caroline.Liddell@defra.gov.uk to join the Defra interest group on MLS measures.

The Sixteenth Conference of the Parties (COP16) to the United Nations Convention on Biological Diversity (CBD) took place during the week commencing 21 October 2024. Matters that were covered at the COP included how to create and operationalise the CBD multi-lateral mechanism for the fair and equitable sharing of benefits from the use of DSI, including a global fund.

NC raised concerns that the subscription-based payment structure may have a negative impact on the use of the MLS as large companies may not have an incentive to sign up.

MO noted that a subscription fee may dissuade users from utilising material listed under the MLS, and highlighted that use of material is important.

24/32 Meeting format (NM)

Three meeting format options were presented to the group. Two rounds of voting took place, and the winning format for the three annual meetings is for the summer technical to take place in person with the option to dial-in online (hybrid meeting), another hybrid meeting and the other meeting to take place exclusively online. The voting was as follows:

Round one:

- **Option one:** all annual meetings to be hybrid meetings. Votes: **5**.
- **Option two:** the summer technical to be a hybrid meeting, another hybrid meeting and the other meeting to take place exclusively online. Votes: **6**.
- **Option three:** the summer technical to be a hybrid meeting, and the two other meetings to take place exclusively online. Votes: **6**.

Round two:

- **Option one:** the summer technical to be a hybrid meeting, another hybrid meeting and the other meeting to take place exclusively online. Votes: **9**.
- **Option two:** the summer technical to be a hybrid meeting, and the two other meetings to take place exclusively online. Votes: **5**.

Defra highlighted the environmental impact of in-person meetings considering the geographical spread of the group. Attendees discussed the options of London-based UKPGRG members to host meetings or for all UKPGRG members to take turns hosting the meetings. The group decided in the first instance Defra would try to arrange meetings at their London office depending on room availability, and if a room was not available then other UKPGRG members would host the meeting. Defra will continue to organise the exclusively online meetings.

24/33 PGR applications / Project updates (All)

UKPGRG members shared updates on projects and applications.

24/34 AOB (NM)

An AOB relating to item 24/24 was raised and has been recorded under the applicable section.

24/35 Date of next meeting – March 2025 (NM)

Attendees agreed the next meeting is to take place online on Wednesday 12 March, from 12:00 – 14:00.

ACTION: Secretariat to share MS Teams invite for this meeting.