MINUTES OF THE UNITED KINGDOM PLANT GENETIC RESOURCES MEETING: 18 MARCH 1997

Present:

Mr M Ambrose	- John Innes Institute
Mr N Green	- SASA
Dr R Sackville Hamilton	- IGER
Dr R Janes	- Wye College
Dr A Karp	- LARS
Dr E Leadley	- BGCI
Dr N Maxted	- University of Birmingham
Dr A Pinnegar	- HRI
Dr C Samuel	- Forestry Commission
Dr G Sage	- BSPB, PBI Cambridge

In attendance:

Dr M Camlin	- DANI
Dr I Haines	- ODA
Mr D Richards	-MAFF

97/1 Apologies for absence

Apologies for absence were received from:

Dr D Astley	- HRI
Mrs S Buckenham	- MAFF
Dr R Ellis	- University of Reading
Dr B Ford-Lloyd	- University of Birmingham
Professor A Grey	- ITE
Professor T Swinburn	- Brogdale
Dr P Wyse-Jackson	- BGCI
Dr B sherman	- HDRA
Dr R Smith	- Wakehurst Place
Mr S Linington	- Wakehurst Place
Dr C Thompson	- BBSRC

97/2 Minutes of the meeting held on 8 October

The minutes were approved.

97/3 Matters arising from the minutes

96/20 UKPGR Group end of year report - Mr Ambrose tabled the Groups 1995 report (copy attached).

97/4 UKPGR Group end of year report 1996

Mr Ambrose advised the Group that he was currently preparing the Groups 1996 report.

97/5 UK Review of pgr

Mr Richards advised that clarification and reference to a number of international fora were awaited before the review would be scheduled.

96/6 Developments on EU Council Regulation 1467/94 Genetic Resources in Agriculture

Mr Richards told the Group that he had recently attended a meeting in Brussels at which the Commission had stated that, following cuts in the pgr budget, they were seeking to get 5mecu for each of the final two year of the regulation (1998 and 1999). However, he stressed that it was unclear whether the Commission would be succesful. Mr Richards also advised that once the funding situation was clear, there was a likelihood that the Commission would issue a third call for proposals. It was envisaged that this would be later in the year.

Mr Maxted advised the group that he had submitted an accompanying measure which covered pgr training, he was hoping for MAFF support in Commission meetings.

96/7 Permanent Inventory of EC plant and animal genetic resources

Mr Richards advised that he had circulated to Group members copies of the United Kingdom Inventory of genetic resources which had been prepared by the Commission. Inorder that the Inventory could be updated Mr Richards asked that members send any amendments to him asap. The Commission proposed to place the final version on the internet.

96/7 and 96/8

Mrs Buckenham had attended the Third Extraordinary FAO Commission on PGR and was scheduled to attend the Seventh FAO Commission meeting. In Mrs Buckenham's absence these items were omitted from the agenda.

97/10 Revision of the International Undertaking: Scope and Access (Questionnaire)

Prior to the meeting Group members had been circulated an IPGRI paper "Options for Scope, terms of access and benefit sharing".

Mr Richards advised the Group that any comments by members on the ideas put forward by IPGRI would be appreciated by MAFF.

Scope

Mr Ambrose advised the Group that the EU were proposing a broad scope with categories of material held back. On the other hand the US and Brazil headed a number of countries who favoured the list approach. Group members also saw the advantages in the broad scope system. Dr Sage was also supportive and commented that Discussions within ASINSEL, who had attended the discussions, viewed the EU proposals as the best way forward.

Access

Mr Ambrose said that he considered it important that there was an air of flexibility and not simply multilateral versus bilateral. He said a flexible approach was important because it did not seem sensible to treat all material in the same way. Dr Sage felt that it was more likely that the EU system would end up as a compromise as opposed to the US "hard nose" approach.

97/11 Sub-group reports

Molecular Characterisation

Mr Ambrose stressed the importance of this area of research to genetic resources. Reports on the molecular characterisation of the European sector of the Barley Core Collection were starting to quantify the relative genetic variability within the primary and secondary gene pools within barley.

Dr Karp advised that a BPP meeting had recently taken place in Vienna. A transcript of the presentations and discussions would be published in an extended edition of Molecular Screening News. In addition a report of an IPGRI workshop on Molecular genetic techniques for plant genetic resources had now gone to the printers and would be published during the summer.

Dr Karp informed the Group that two demonatration projects on the application of molecular characterisation to genetic resources had been successful in the last round of submissions to DGXII.

97/12 Summer technical meeting

Dr Janes reported to the Group that she had obtained agreement to welcome the Group to visit the National Fruit Collection on Tuesday 16 September.

97/13 Election of Chairman

Group members were unanimous in agreeing for Mike Ambrose to serve a further term as Group Chairman.

97/14 Any other business

Dr Haines advised that he would be attending the next CGAIR in Cairo in May. He said that he would be interested to hear any views from members on the IPGRI Technical Centres.

97/15 Date of next meeting

The date of the next meeting was set for 14 October 1997 at 11.00am conference room B.

UK Plant Genetic Resources Group

ANNUAL REPORT 1995

UK Plant Genetic Resources Group

ANNUAL REPORT 1995

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Introduction

The past year has been an active one for the Group both in terms of its own activities and in providing technical support to MAFF on the large numbers of issues that have arisen throughout this period. Two technical summer visits provided good opportunities for Group members and observers to learn and be updated on key areas of PGR. These visits are an important aspect of the Group's remit in providing a platform for technical discussion. The value of the broad range of PGR expertise represented within the Group shows itself on such occasions as the details of very diverse management problems can be discussed from a wide range of different perspectives.

For individual Group members it has been an exceptionally busy period with project submissions to the Darwin initiative, EU programmes such as Biotechnology (Framework4), Agriculture and Fisheries programme and the EU regulation 1476/94 on conservation, characterisation, collection and utilisation of genetic resources in agriculture. UK groups have been successful in winning a good share of grants in the last round.

The revitalisation of the European Cooperative Programme for Genetic Resources (ECP/GR) under a full time secretariat has also seen a number of important developments following the recommendations of the Technical Consultative Committee (renamed Technical Steering Group) have occurred this year. These are dealt with in more detail later in this report. In all these initiatives, participating members of the UKPGR Group are making significant contributions which underlines the very proactive contributions made by groups from the UK.

The close dialogue between the UKPGR Group and National Representatives in MAFF over the wide range of issues bears testimony to the successful way in which the Group is fulfilling its functions on technical support. The further development of the Sub-Groups as they begin to push forward on a series of parallel agendas can only be of further benefit to both sides.

Finally I would like to record the Groups congratulations in the recent news that RBG Kew have succeeded in securing funds from the Millennium Commission towards the building of a new seed bank at Wakehurst Place to house what will be one of the worlds largest and most significant collections of seeds of wild species. The news of this new facility marks a significant increase in the UK's participation and responsibilities in the world of plant genetic resources.

Group membership

Dr Jeremy Cherfas has left the Henry Doubleday Research Association but hopes to continue his interests in the area of conservation of PGR and will continue to receive minutes of the Groups meetings. The representation of NGO groups on the Group will be discussed at the next Group meeting. Mike Wilkinson has left Scottish Crops Research institute (SCRI) to take up an appointment in University of Reading in which the group wish him well. The PGR interests at SCRI, including the Commonwealth Potato Collection, will be covered by Dr Gavin Ramsey. The National Institute of Agricultural Botany (NIAB) have joined the Group with specific interests in the molecular characterisation and diversity studies.

Activities of the Group

The Group held two meeting in London on the 5th April and 11th October. In addition to the two technical summer meetings held at IACR-Long Ashton Research Station and PBI Cambridge there were meetings of the (material transfer agreements and informatics) sub-groups.

Technical meetings

These meetings form an important part of the Groups activities providing the opportunity to focus on specific topics of PGR on sites which are actively engaged in the area. The opportunity to focus on the more technical issues and is an important way of keeping the Group informed of the latest developments. The Group was particularly active with two meetings held over the summer period.

IACR Long Ashton Research Station 15th August

The morning was taken up with an introduction to the *Salix* working collection including a tour of the collection and field trials.

The afternoon session started with a presentation of the molecular characterisation of the *Salix* collection. This was followed by a review of the Generic EU Molecular Screening Tools project coordinated by Dr Angela Karp at the station followed by presentations of specific research programmes supported by the project at IACR-LARS.

The comparison and evaluation of the various molecular techniques currently available for deployment on germplasm screening has made rapid progress over the past three years. Strengths and weaknesses of the various techniques were presented and discussed. Guidance and evaluation notes as to the most suitable techniques for specific applications are in the process of being drafted. The cheap and reliable characterisation that these techniques offer is of enormous importance for PGR as they are fast becoming the most cost effective means of generating data for comparative work on accessions. This is especially important where little prior characterisation has taken place. The Group was therefore provided with the best possible opportunity to update itself on the developments in this field.

PBI Cambridge 19th September

The relationship between the PGR community and commercial plant breeding is an important one recognised by the Group in the representation of British Society of Plant Breeders on the Group. The changing relationship between the private and public sector in agricultural science over recent years is most clearly seen by the move of the public sector away from near market research. With PGR collections remaining in the public sector as strategic long term resources the relationship between these two communities has undergone some changes. The meeting marked an important step in examining these changes and their implications and addressing the current and future expectations of the two groups.

The morning session was spent touring the facilities associated research groups and discussion the operations involved in a large plant breeding company. It was interesting to note the strong technical developments which serve to maintain the competitive edge.

The afternoon was spent discussing the economics of plant breeding programmes and the options relating to the opportunities to widely utilise PGR. This was set against the pressures of limited resources available for characterisation of material to the level required or transfer of traits of potential interest from exotic sources into more cultivated backgrounds. The resulting gap between the markets expectations and what can be delivered was therefore clearly brought into focus. The point was taken up by Dr Penny Maplestone who saw some possibility of raising the problem within the Agricultural Systems Directorate of the BBSRC.

Sub-group reports

Bioinformatics

The Group server on Internet (http://nasc.nott.ac.uk:8200/) went public at the end of May. By the end of the year 10 entries giving details of UK collections and training had been entered. Addresses on other PGR sites world wide have also been included and our site address now appears on a number of web pages and listings. An Emailer for the Group was established to facilitate the more rapid dissemination of information and documents between members of the Group.

A presentation was made at the end of the Groups October meeting of the database CORE STORE presently being developed at Horticulture Research International for the National Fruit Collections apple collection. The initiative is aimed at developing software that combines plant pedigree and primary plant traits with molecular mapping data. The HRI group were interested to learn about the potential for developing specific modules of use by the genetic resources community. A number of Group members offered their help in the consultation phase of feasibility study for such as proposal.

Material Transfer Agreements

The issue of ownership and access to genetic resources is currently high on the agenda of many of the discussions currently in progress in PGR. With so many positions being adopted it is difficult to foresee in which direction these discussions will ultimately go.
Clarification is being sought in relation to the base collections which come under the auspices of IPGRI/FAO and on the definitions of what constitutes a National collection.

Ecology and Biodiversity

The development of a working agenda for the group is well in hand. Issues include the complementarity and integration of ex-situ and in-situ conservation as well as looking at optimising strategies for conserving genetic diversity in relation to the two approaches.

Taxonomy

Review of the taxonomic classification for cultivated crops in the UK and international legislative and common use (such as ISTA, OECD, EU, IPGRI, UPOV), with a view to proposing standardisation.

Molecular Characterisation

The first of the summer technical meetings at IACR- LARS, was viewed as a useful meeting and was supported by a good range of Group members wishing to be brought up date on this important field. What emerged for many was how rapidly the technical developments are moving in this field. The opportunities that are emerging for the PGR community are tremendously exciting and will, if funding is forthcoming, see a very significant rise in the characterisation of collections which will benefit both the utilisation of the material through the more detailed picture that is revealed of the pattern of genetic variability within a collection as well as aiding in management problems such as the identity of true duplications. The linking of molecular screening to work on linkage maps is potentially one of the most significant developments to work towards over the next five to ten year period.
An important development that has emerged from the generic EU Framework III programme 'Development of molecular tools for screening biodiversity' coordinated by Dr Angela Karp at LARS, was the formation of the 'Biotechnology for Biodiversity Platform'. This initiative aims to provide a forum for communication and technology transfer between end-users and the

programme. A planning committee meeting was held at IACR on 25th October and was attended by Dr Angela Karp and Mr Mike Ambrose.

Documents before the Group

* Country Report for the UK for inclusion into the ICPPGR's World Report on the State of Food and Agriculture.
* Report of EU Molecular Genetic Screening Tools meeting and the Technology Integration Workshop. Cortona, Italy.
* Report of the satellite meeting to the 2nd European Grain Legume Conference, 'Mobilisation of Grain Legume Genetic Resources', 13th July, Copenhagen, Denmark.
* World information and early warning system on plant genetic resources (WIEWS/PGR)
* European Union Germplasm Documentation Network (EUGENE)

Plant Genetic Resources meetings (excluding ECP/GR meetings)

Follow on meeting to the EU 'Molecular Genetic Screening Tools' was a 'Technology Integration Workshop', 25-27th June, Cortona, Italy.

Satellite meeting to 2nd European Grain Legume Conference. 'Mobilisation of Grain Legume Genetic Resources', 14-16th July Copenhagen, Denmark.

European Cooperative Programme/ Genetic Resources (ECP/GR)

UK commitment and involvement in this programme is an important contribution to international plant genetic resources. The importance of a fulltime secretariat to the programme was recognised and supported at the start of phase V has been borne out by the very promising developments within the existing groups and stronger emphasis in carrying out the agreed work plans. Discussion documents from the secretariat office (IPGRI) in outlining the problems of representation on the working groups with the growing number of countries now participating in the programme were the cause of much discussion. The UK as a major funding supplier of the programme was eligible for up to seven attending members but with further groups likely in the future there is a strong possibility of the UK not being able to be represented at the meeting of a these groups in which the UK might have substantial interests. The decision to remove central crop database managers from the quotas should provide the required flexibility to offset the problem.

The Technical Consultative Committee (TCC) meeting (Nitra, Slovakia 21-23 September) attended by MAFF as National Coordinators was deemed a useful meeting with a number of significant decisions taken concerning the future of the programme. The strong sense of ownership and concomitant responsibility of the participating countries was emphasised by the renaming of the TCC as a Steering Committee which will play a more active role in shaping future plans and priorities of the programme. The Steering Committee undertook to remodel the structure of the programme into a series of networks which would include crop orientated as well as thematic groups such as documentation and information and *in-situ* and on-farm conservation as well as other *ad hoc* actions. The final recommendation of the Steering committee was that the ECP/GR networks, based as they are on the active national programmes, be used as the platform to facilitate the implementation of the Global Plan of Action in the European region as part of the FAO Global System on Plant Genetic Resources. This recommendation was subsequently endorsed by the FAO European Regional Conference.

EU Council Regulation No 1467/94 Genetic Resources in Agriculture
Conservation, characterisation, collection and utilisation of genetic resources in agriculture.

The call for proposals was finally announced for 31st March. Funding in this first rounds was for around 10 projects within the budget of 3.5m ecu for this year. A total of 72 proposals were submitted including 7 from the UK. The evaluation process resulted in a list of 23 projects graded A or B. The meeting of the Committee on Genetic Resources in Agriculture met in late November and selected a short list of 10 projects (8 plant) with a further two on a reserve list. A second call for proposals is anticipated in the first quarter of 1996.

Appendix 1. **Members of the UKPGR Group**

Mr M Ambrose (Chairman)	John Innes Centre
Dr M Anderson	University of Nottingham
Dr D Astley (Tech. Secretary)	HRI Wellesbourne
Dr F Bisby	University of Southampton
Dr H Case	Wye College, University of London
Dr C Thompson	BBSRC
Dr R Ellis	University of Reading
Mr A Fletcher	Forestry Commission
Dr B Ford-Lloyd	University of Birmingham
Dr A Gray	Institute of Terrestrial Ecology
Mr N Green	Scottish Agricultural Science Agency
Dr N Hodgetts	Joint Nature Conservation Committee
Dr A Karp	IACR- Long Ashton Research Station
Dr R Sackville Hamilton	IGER, Aberystwyth
Dr G Hendry	University of Sheffield
Mr S Linington	Royal Botanic Gardens Kew, Wakehurst Place
Dr N Maxted	University of Birmingham
Mr G Pattison	NCCPG
Dr G Sage	Plant Breeding International Cambridge
Mr R Smith	Royal Botanic gardens Kew, Wakehurst Place
Prof T Swinburne	Wye College, University of London
Dr G Ramsey	Scottish Crops Research Institute
Mr P Wyse Jackson	Botanic Gardens Conservation International

Observers

MAFF Research and Coordination Division	Mr J Suich Mrs S Buckenham Mr D Richards
MAFF Science Division	Dr S Popple
Overseas Development Administration	Dr I Haines
DANI	Dr M Camlin

Appendix 2. **Sub-groups**

Informatics

Mary Anderson*
Mike Ambrose
Helen Case
Nigel Maxted
Ian Thomas (IGER)
Mike Wilkinson
Peter Wyse Jackson

Material Transfer Agreements

Dave Astley*
Alan Fletcher
Niall Green
Greg Sage
Roger Smith

Seed Storage

Simon Linington*
George Hendry
Richard Ellis
Dave Astley

Taxonomy

Niall Green*
Frank Bisby
Alison Lean (Wye College)

Ecology and Biodiversity

Ruaraidh Sackville Hamilton*
Ian Gray
Nick Hodgetts
Roger Smith
Graham Pattison
George Hendry
Nigel Maxted
Helen Case
Peter Wyse Jackson
Brian Ford-Lloyd

Molecular Characterisation

Brian Ford-Lloyd*
Angela Karp
Ruaraidh Sackville Hamilton
Trevor Gilliland (DANI)
Carol Bazeley (Wye College)
Ian Forest (Forestry Com.)
Bob Cooke (NIAB)

* Sub-group coordinators

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