ECPGR Umbellifer Working Group

Report for Period June 2006 – June 2008

Representatives of the WG held a successful mid-term meeting at the VEGNET meeting in Olomouc in 2007. In January 2008, Dave Astley, the Chairman of the WG resigned as Chair and from the Umbellifer Working Group for personal reasons. In June 2008, Emmanuel Geoffriau was appointed as the interim Chairman, but at the time of report writing had not been confirmed formally by the WG members in this position. The working group's activities have been biased towards carrot with activities relating to crops of the other 8 genera (*Anethum, Apium, Carum, Chaerophyllum, Coriandrum, Foeniculum, Pastinaca & Petroselinum*) being limited to specific national programmes/gene banks.

I. RESULTS

a. Comparison of workplan (milestones) versus results obtained

Work plan (milestones)	Results Obtained	Aims/goals not (fully) reached?	Completion ratio (%)
Documentation: EUDB, survey of usage of germplasm data	The EUDB has been rebuilt following the Working Group meeting in Olomouc using the EURISCO format with data from EURISCO and national programmes. The EUDB2007 contains data for 9396 accessions from 39 institutions in 21 countries. Usage data only acquired during collection	There are still some significant data sets missing and efforts will be made to acquire these data directly from the National Umbellifer Coordinators.	EUDB 80%
Ecological survey data	Survey of usage data showed only acquired during collection. Ecogeographic survey activity was minimal	Discussion at VEGNET noted collaboration with in-situ Network might move this forward.	
Characterisation & descriptors	Partners using UPOV descriptors for celery, dill, parsley & parsnip. Material characterized for carrot & other Umbel crops in France, Germany, Poland & UK.	No descriptors development for other crops reported	

Evaluation	Significant evaluation in Germany, Poland & France in carrot, caraway, celery, fennel & parsley. Molecular studies on carrot carried out in France and on carrot, celery and parsley in Germany	Evaluation reports limited to 2 countries. Proposals developed for a European carrot research group involving WG members.	
Identification of Most Original Accessions	No significant developments in this area.		
Regeneration of collections	Significant numbers achieved for carrot, celery, dill, parsley & parsnip.	No indications of regeneration for other crops in Phase VII.	
Safety duplication	Range of difference between gene banks, some virtually fully duplicated others not started. Network of black box centres established.	This is an area identified as requiring significant effort in the future to bring safety duplicates of all collections into secure storage.	

b. Contribution to the four ECPGR priorities for Phase VII

1. Characterization/evaluation (including modern technologies)
Significant achievements for carrot in the GENRES Carrot project. Inputs for other crops have been considerable, but the work restricted to specific national programmes, such as Germany, Poland and France.

2. Task sharing
Several Working Group members have been involved in discussions to develop a European carrot research group.
The WG members have established a network of centres willing to host black box safety duplicates for other partners.
Collection of germplasm has been carried out to fill gaps in the collections by WG partners funded through national programmes and ECPGR.

3. *In situ*/on-farm conservation and development
Some national programmes are involved in on-farm conservation, such as Hungary & Poland, while others are promoting participatory breeding with local growers,e.g. France.
There is the need for ecogeographical surveys for the wild relatives of the umbellifer crops in order to identify fully the gaps in collections and assess the opportunities for *in-situ* conservation.
The situation in the UK is clear for umbel crop wild relatives because they are either at the extremes of the distribution and red book listed occurring in few well documented sites or are wide spread and not in any danger of erosion.

4. Documentation and information
The EUDB was rebuilt in 2007 following the Working Group meeting in Olomouc using the EURISCO format. Data were sourced from EURISCO and national programme curators. The EUDB2007 contains data for 9396 accessions from 39 institutions in 21 countries. There are still some significant data sets missing and efforts will be made to acquire these data directly from the National Umbellifer Coordinators.

c. Relevance (regional / international)

Did your work and/or outputs have inter-regional dimension? (if it did, give precisions)
Partners have very close research links and have collaborated on germplasm collection in Europe with Professor Phil Simon at the University of Wisconsin, USA.

d. Lessons learnt (recommendations)

Lessons learnt relevant for other Working Groups?
The GENRES programme is an excellent vehicle for the promotion of a range of work, for example the GENRES Carrot project. But it is difficult to maintain the momentum of the work once the financial resources of the project cease. The working group is a natural starting point for the development of such international projects.
It is difficult to promote the work of a new working group among the partners particularly for minor crops. For a multicrop working group, such as the Umbellifer WG there may be only 1-4 national programmes having an active interest in a minor crop. It is inevitable therefore that the group's activities concentrate more on "major" crops, which for our group is carrot. The only way forward is for the relevant partner groups to organize themselves and to appoint a subgroup crop coordinator, but experience for descriptor development suggests this is unlikely to happen in all subgroups. The response to Umbellifer WG emails sent to all partners is generally poor. It is hard to know whether individual national representatives are uninformed, unable to collaborate due to lack of funds, resources or support, or if there are other reasons.

II. ANALYSIS

a. Bottlenecks

What were the experienced bottlenecks?	How do you plan to solve the bottlenecks?
1. Finance - The greatest bottleneck is the lack of financial resources, as evidenced by the success of the GENRES projects. Great achievements resulted from relatively small injections of funds into national programmes. Of course we are aware that small amounts of money per national programme builds into larger sums per project and significantly larger for all projects.	Developp a higher link between WG activities and Nationally funded programs. Submit projects to EU proposals.
2. Inputs in kind - The WGs rely upon the inputs-in-kind system to achieve their work plans. It is often the case that national partners agree to carry out work that they subsequently cannot achieve in practice due to a lack of finance, time or support staff. WGs are subsequently evaluated on their achievements based on these effectively untenable work plans, objectives and milestones.	Either national crop coordinators have to be more realistic in their assertions as to what is achievable as inputs in kind or each work plan has to be scrutinized by the ECP/GR National Coordinators and the Crop Coordinators to discuss whether the inputs in kind are feasible. If inputs are considered not to be achievable, the WG Chair has to be informed and the work plan rewritten.
3. Communication within WGs is difficult because some partners do not keep the Secretariat or the Chair informed of changes in their contact details, particularly email addresses.	This is a measure of whether individual partners want to play an active role in the WG. The functionality of the WG is the responsibility of the national umbellifer crop coordinators.

b. Internal support needed (Secretariat, Steering Committee, other Working Groups, etc.)

-Need for experience sharing from other WG (ex : Brassica as a cross-pollinated seed propagated crop, model crop for Aegis)
-from secretariat or steering committee, encourage countries to have active members in WG in order to keep WG functional.

c. External resources needed (collaboration, external funding)	
The main limitations are funds and staff time in support of inputs in kind.	
III. PLANS	
a. Planned activities	b. Expected results
1. There are opportunities for the Umbellifer group to collaborate with the Medicinal and Aromatic Plants (MAP) Working Group on some of the minor umbellifer crops and wild taxa. We will investigate areas of mutual interest with specialist groups in the MAP group	
2. The members of the working group present in the VEGNET meeting agreed that the WG should try to implement the AEGIS concept by using carrot as an exemplar crop.	Reference documents for quality management Implementation of the Aegis concept on carrot
3. The WG will build expertise for the characterization of minor Umbellifer crops by identifying experts in a particular crop area to take a leading role in the Working Group.	
There are areas of *in situ* conservation work that the Umbellifer group will benefit from collaboration with the *In situ* and On-farm Conservation Network. In particular, the Umbellifer WG has an interest in ecogeographical surveys for the wild relatives of the umbellifer crops to promote their conservation and utilization.	Better knowledge of wild species, and the status of in-situ populations
The WG will agree a common format for evaluation data allowing the integration of these data into the European Umbellifer database.	