

## Working Group on Potato

### Progress report for the period June 2006 – June 2008

<b>I. RESULTS</b>			
<b>a. Comparison of workplan (milestones) versus results obtained</b>			
Workplan (milestones)	Which results have been obtained?	Which aims/ goals have not been (fully) reached?	Completeness ratio (%)
<u>Milestone 1</u> Update the European Cultivated Potato Database (ECPD) as well as its web site: <a href="http://www.europotato.org">www.europotato.org</a>	During the reporting period, a new tool allowing each data provider to renew his data directly on site has been developed and tested by a few selected contributors. The tool was validated and is now being rolled out to all contributors. Invitations have been issued to prospective new contributors. Additions and editing are conducted through the web interface (password protected). The web site was improved, e.g. a new entry in the 'Indexes' menu was included, enabling a search for varieties produced by specific breeders. The total number of visits to date is 84,000 with 1,160,000 variety descriptions being requested.	Data contributors have not yet completed the first larger on-line update of the common database concerning their germplasm holdings and related information.	SASA has finished creating a data import and editing tool for the data contributors. Only some minor changes may be needed.  Estimate of completeness of the on-line database update by the data contributors: 40%
<u>Milestone 2</u> Organize the third WG meeting in particular for the curators managing clonal stocks (varieties & breeding lines) to discuss the common database and progress on the variety core collection. The meeting	SASA identified its draft core collection but input from other contributors to this objective is needed. At the request of delegates, a page was added to the website to allow identification of	Because the database is not complete, the creation of the core was delayed.	Estimate of completeness of the creation of the core collection: 20%

took place in Edinburgh, 5 Dec 2006 and was hosted by SASA	cases where multiple accessions of a variety were held by a single maintainer. A facility has also been added to website to identify varieties maintained by only one maintainer not located in the country of origin of a variety. This allows maintainers to locate nationally-bred varieties missing from their collections.		
<u>Milestone 3</u> Update the European Wild Potato Database (EWPD) as well as its web site. This database includes Andean cultivated species.	The data sets from CPC and CGN were renewed. The identification of redundancies was continued: e.g. several of the new CPC accessions appeared to be redundant (within and/or between collections). The updated database can be downloaded.	A new dataset on VIR's Andean cultivated spp. is under preparation by its curator.	A continuous task. 80%
<u>Milestone 4</u> Set maintenance responsibilities within the EU for the potato germplasm from Latin America by means of 'most original sample' or current health status (plant passport).	A proposal on the allocation of maintenance responsibilities for individual accessions within the EU (provided with EU plant passport) is still under construction.	On a global level the allocation of maintenance responsibilities seems to be not of interest.	70%
<b>b. Contribution to the four ECP/GR priorities for Phase VII</b>			
1. Characterization/evaluation (including modern technologies) A) clonal stocks: ECPD Several collection holders carried out smaller evaluation programs to screen the clones for quality traits and disease resistance, particularly late blight. SASA has entered such new data into database. Virus elimination programmes are on-going. B) Andean species: EWPD The characterisation results (with AFLP markers) from the Dutch CBSG project were used to improve the taxonomy of the accessions. A PhD will analyse and publish the results on screening of the material for late blight resistance.			

<p>2. Task sharing Currently there is little progress to report concerning the allocation of responsibilities for the maintenance of redundant wild potato accessions within the EU (IPK, CPC and CGN).</p>
<p>3. <i>In situ</i>/on-farm conservation and development Several national and regional NGO's are active in this field, but their results are not known to the chair of the working group.</p>
<p>4. Documentation and information A) clonal stocks: ECPD SASA constructed a web interface to allow each data provider to add to and edit their data-set. Furthermore, the functionality of the web site was strongly improved by searches via new indexes for characters (= traits), countries, breeders and images. Also new reporting tools were added. Data can also be exported in Excel spreadsheet format (by registered users). The inclusion of new collections into the common database is ongoing. B) Andean species: EWPD For the documentation of the available wild spp. the datasets from CPC and CGN were renewed. New redundancies were identified. An update on cultivated potato spp. from VIR was announced in the past by the curator.</p>
<p><b>c. Relevance (regional / international)</b> Did your work and/or outputs have inter-regional dimension? (if it did, give precisions)  A) ECPD: The ECPD is unique and well respected. Direct links to records in this on-line database are e.g. available from EUCABLIGHT (<a href="http://www.eucablight.org">www.eucablight.org</a>) and the Potato Pedigree Database (<a href="http://www.plantbreeding.wur.nl/potatopedigree/">www.plantbreeding.wur.nl/potatopedigree/</a>).  B) EWPD: Efforts put into this database will also benefit the APIC database, comprising the world potato genebanks (<a href="http://www.potgenebank.org">www.potgenebank.org</a>), which needs to be updated to support Global Trust activities.</p>
<p><b>d. Lessons learnt (recommendations)</b> Which lessons learnt are also relevant for other Working Groups?</p>

<b>II. ANALYSIS</b>	
<b>a. Bottlenecks</b>	
What were the experienced bottlenecks?	How do you plan to solve the bottlenecks?
1. Input of new data and updating existing information by the data providers.	encourage the data providers
<b>b. Internal support needed (Secretariat, Steering Committee, other Working Groups, etc.)</b>	
Validation tools.	
<b>c. External resources needed (collaboration, external funding)</b>	
Funding to conduct genotype analysis to validate the considerable number of anomalies identified within the database needs to be considered and actioned.	

<b>III. PLANS</b>	
a. Planned activities	b. Expected results
1. Identification of duplicate accessions hidden by misspellings and transcription errors.	See II c
2. Create a variety core collection (with help of all collection holders).	After a review of its collection, SASA has identified a considerable number of non-UK bred virus infected varieties within its collection which are held by at least 3 other maintainers. SASA intends to inform ECPD contributors of its intention to no longer maintain after 2008. Priority will be given to the virus elimination of remaining 71 virus infected UK bred or certified varieties that it holds.
3. EWPD: finalize setting of maintenance responsibilities for individual accessions within EU.	
4. EWPD: include major update on Andean cultivated species maintained by VIR. Search for redundant accessions in particular because of the new records. Update evaluation data where relevant.	Updated database available for download.
5. Renew EWPD web site.	Restyled web site in line with ECP/GR format.
6. Not WG specific: participate in collecting expeditions in Latin America as soon as allowed again (in cooperation with countries of origin & USDA).	Cover 'white spots' and collect rare species.