



EAPR Newsletter

Newsletter for the Members of the European Association of Potato Research (EAPR)

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Message from the President of the Association

Dear colleagues,

The International Year of Potato 2008 (YIP2008) included many international conferences and national workshops dedicated to the potato in all parts of the world. One of them was the very successful 17th Triennial Conference of EAPR in Romania, in one of the main potato growing countries in Europe. The media also picked up YIP2008 well and published more stories than usual about the potato. The public is now better informed of the value of potato as a superior source of food in the developed and developing world. It should provide good back-stopping for our continuing efforts in advancing potato research and the potato sector in general.

This year 2009 is also something special for the potato because EVOLUTION is the theme of the year. Scientific societies and many forms of media will highlight evolution because 200 years have passed from the birth of **Charles Darwin** and 150 years from publication of his book entitled *The Origin of Species by Means of Natural Selection, or The Preservation of Favoured Races in the Struggle for Life*. Darwin made key observations for his book during a voyage around South America and saw potatoes on the shore of an island in Chile. If he had more time to explore the Chilean coast or climb up the Andes in Ecuador to explore the species richness of potato, he would probably have been fascinated. He seems to have missed these opportunities when doing other important observations in those areas but made a note in his book about variation of potato under domestication in Europe.

One of the central figures who dedicated his time and enthusiasm on potato evolution in the century after Darwin was **Carlos Ochoa**, a Peruvian agronomist and breeder. Ochoa passed away at the end of 2008, the year dedicated to potato. An obituary is included in this newsletter. Ochoa would probably have enjoyed the 'year of evolution' which so closely connects with his interest on potatoes. Indeed, this year provides us with an opportunity to highlight the rich genetic resources comprised by wild potatoes, a largely untapped source of useful genes for potato breeding.

This newsletter also reports the key issues discussed in the annual Council meeting of EAPR held in Wageningen, The Netherlands, for two weeks ago. All indicators with our association and journal are to the better direction, as you'll learn from the Minutes. We continue to streamline the operational side of EAPR, which now involves the International Society for Horticultural Science (ISHS). EAPR pays to ISHS for management of the membership matters and the homepage. The next goal will be to reduce the workloads of the secretary and particularly the treasurer and to make these position no longer legally bound to the Netherlands. Currently, these two Council members are those individuals who are legally responsible for the EAPR Financial Affairs Foundation registered in the Netherlands. The Council considers that this type of an arrangement may no longer be needed and looks for other options which better serve for flexibility and continuity of management of the EAPR. You as an EAPR member are encouraged to offer views on this matter to me, Anton (secretary) or Romke (treasurer) or any other member of the Council.

Jari Valkonen

SECTIONS:

News from the Council

The EAPR Council is working for you (Council meeting , Wageningen, January 15-16th 2009)



(From right to left: Serge Duvauchelle (France, Councilor); Katrin Kotkas (Estonia, Councilor); Sorin Chiru (Romania, Past President); Paul Struik (the Netherlands, non-executive Council member); Anton Haverkort (the Netherlands, Secretary); Jari Valkonen (Finland, President); Norbert Haase (Germany, Councilor); Louise Cooke (United Kingdom, Councilor); Romke Wustman (the Netherlands, Treasurer); Jean-Pierre Goffart (Belgium, President elect); absent: Mike Storey (United Kingdom, Vice-President))

Summary of the 53rd council of the EAPR

Wageningen January 15 and 16, 2009.

Present

President	Jari Valkonen
Past President	Sorin Chiru
Secretary	Anton Haverkort
Treasurer	Romke Wustman
Councilor	Norbert Haase (coordinator of country representatives)
Councilor	Serge Duvauchelle (coordinator of scientific cooperation)
Councilor	Katrin Kotkas (coordinator of section chairs)
Councilor	Louise Cooke (coordinator of cooperation with other societies)
President elect	Jean-Pierre Goffart
Non executive	Editor-in-chief of Potato Research (Paul Struik)

Absent with notification

Vice president Mike Storey

Invitees:

Willemien Lommen (matters concerning Potato Research only)
Joseph van Assche and Peter Vanderborght, ISHS (discussion about cooperation with ISHS)

The meeting approved the minutes of the 52nd ordinary council meeting held at Wageningen a year ago, amended the minutes of the 18th general meeting held at Brasov in July 2008 and approved the extraordinary council meeting held at Brasov.

Sorin Chiru and the Council evaluated the 17th triennial held in Brasov in July 2008 and we concluded that the meeting was a very successful one with 340 participants from all continents. Financially there was a small surplus. The workshops on zebra chips, organic farming and Bio-exploit were a great success and the formula of having plenary sessions on the first and last day proved successful and will be repeated.

The council applauded Paul Struik and his editorial team for having Potato Research completely back on schedule. Paul was requested to organize with Springer to get us back on the ISI list showing Potato Research size, regularity and impact. The need for the Council to act as an Editorial Board as at present deserved some further investigation since the current structure of editorial management may no longer require it. The Council will continue to be involved but possibly in the role of a Board of Trustees that appoints the Editor-in-Chief who will report matters of the journal to the Trustees. **The Council encourages members to submit papers to the journal to assure its continuing success.**

The financial situation of the Association has improved significantly and Romke Wustman was applauded for the amount of time and dedication given to achieve all this.

We re-discussed the various roles and tasks of the council members and which kind of information they should deliver to the members and the website. Please have a look at the website that was renewed recently.

The Council proposes that Pathology Section would cover insects and nematodes in future, and also aphids unless discussed as virus vectors dealt with in the Virology Section. All Sections of EAPR have plans to arrange meetings in 2009 or 2010. The information will be posted at the EAPR homepage.

Secretarial support to EAPR: as of January 1st the secretarial support – as per contract date – from Europoint ended and was taken over by the International Society for Horticultural Science (ISHS) in Leuven/Louvain, Belgium. Joseph van Assche (director) and Peter Vanderborgh from ISHS were with us to discuss the present services they provide to EAPR and – upon our request - which future options could be available.

Anton Haverkort
Secretary

News from the Editor of Potato research

Progress on Potato Research

Although the editorial board realizes that the timing of the different steps in the processing of papers submitted for potential publication in Potato Research needs to be shortened, it is with great pleasure that we can announce that the 2008 volume of Potato Research (i.e. volume 51) was completed in the year 2008. The last double issue of that volume containing the proceedings of the Brasov conference was put on internet early December.

Meanwhile the production of volume 52 is in full speed. Three papers of the first issue are already in the Online FirstTM section of the Potato Research website and the other ones for this issue are currently (January 15, 2009) in the stage of galley proof. We expect that issue to be completed early February 2009. Powdery scab and glycoalkaloids are important key words for this very nice issue.

The production of the second issue of Volume 52 is also underway and this will contain some minireviews and papers on the Bioexploit workshop during the Triennial Conference in Brasov.

Given these developments the Council has decided to request Springer to ensure that Potato Research is listed on the ISI list of journals and will get an impact factor. It will be a new challenge to increase that impact factor as fast as possible.

Paul C. Struik

News from the Section Chairpersons

During the 17th Triennial Conference of the EAPR on the Section meetings several new Section Chairmen were re-elected or elected as following:

1. Engineering and Utilization - **Adrian Cunnington** was re-elected for the following three years period.
2. Pathology - **Asko Hannukkala** was elected as a new chairman.
3. Virology - **Carl Spetz** was elected as a new chairman.
4. Agronomy and Physiology - on the joint meeting of Agronomy and Physiology Sections it was decided to join these two sections and rename as an Agronomy and Physiology Section. On the same meeting a new section chairman **Mehmet Emin Caliskan** was elected.
5. Breeding and Varietal Assessment - **Herman J. Van Eck** has been the leader of the section already for two election periods and therefore it was decided **to elect a new chairman** on the next section meeting in 2009.

Information on contacts of the section chairmen and on the coming section meetings will be available on the home page of EAPR soon.

News from the Country representatives

Contributions from Country representatives will be presented in the following issues.

News from the Association Members

Honorary Memberships

During the 17th Triennial Conference of the European Association for Potato Research in Brasov two members, **Melvin Askew** and **Gheorghe Olteanu** received the honorary membership.

In this issue we present some merits of Melvin Askew.

CURRICULUM VITAE FOR MELVYN F.ASKEW/CENSUS-BIO.

Melvyn F. Askew, B.Sc. (Hons.), M.Phil., C.Biol. M.I Biol., A.R.Ag.S.

Melvyn F. Askew has approximately 40 years' experience of agriculture and the wider land-based industry sector. He is a fully qualified agriculturalist and Chartered Biologist. He has considerable senior management experience at national and international level.

During his career he has become a senior figure in the production and non-food uses of plant products area in Europe, North America and elsewhere.

His experience includes being a senior manager and Head of Group (Agriculture and Rural Strategy Group) at Central Science Laboratory, York, UK, the only laboratory owned by the British Government and underpinning agriculture, food and environment.



He was a member of staff for Ministry of Agriculture, Fisheries and Food until it became Department for Environment, Food and Rural Affairs more recently. He left CSL at the end of the financial year 2006/7 and has started an SME business called Census-Bio, this being based on the concept of a centre for sustainable bio-resources.

Melvyn Askew has led major non-food related projects funded under other EC Framework Programmes (eg. IENICA and INFORRM-IENICA); has acted as an assessor for EC funded work in the non-food sector; has assessed projects on non-food issues for EC, the Government of the Republic of Ireland, The Government of Alberta, Canada; advised senior British Government staff on policies and priorities for the non-food sector; chaired or spoken for EC Directorates General/EC generally at a number of events (the launch of the TP for Biofuels in Brussels, 2006; the biorefining event run in Helsinki under the Finnish Presidency of EC in autumn 2006; the Nuremburg event on biorenewables run under the German Presidency of EC in Spring 2007); has a formidable international speaking record in his own right on a range of topics but especially on non-food products from crops, their production and use (an approximate estimate shows he had spoken at national and international level in about 30 countries).

He is also a member of the editorial/advisory committee for a new journal published by John Wiley on the topic of non-food crops and products; a member of the programme committee of British Crop Production Council for its conference in Glasgow 2007; a member of the editorial committee for the Indian journal 'Brassica'; a member of the editorial committee for the journal 'Potato Research'; a member of Council, representing UK/Institute of Biology of the European biologists organisation ECBA; he sits on the Technical Working Group of the Global Bioenergy Partnership (GBEP) organised under G8 and run by UN/FAO.; is a member of the SAC consultative committee on agricultural crops , which meets in Edinburgh; sits on Conseil Scientifique of ITB in Paris.

In the past he has served on numerous UK and international committees including Sugar Beet Research and Education Committee (UK), Council of EAPR(Wageningen); Comite Scientifique of CETIOM (Paris); Advisory Committee of the Olds Institute, Alberta, Canada; and reported to British parliamentary committees assessing non-food crops and uses in UK and elsewhere.

Currently he is a member of a number of learned societies including EAPR (Wageningen); IIRB (Brussels); Institute of Biology (London); GCIRC (Paris).

He has been invited to Buckingham Palace by Her Majesty Queen Elizabeth II on the occasion of a reception for Pioneers for the Nation (for services to renewable resources) ; has been invited to become a Visiting Professor, focusing on bio-resources, by Harper Adams University College in UK and has been awarded an Associateship of the Agricultural Societies of UK for services to agriculture.

DEDICATION TO CARLOS OCHOA

Carlos Ochoa - potato taxonomist and breeder (1929-2008)

One of the best known potato taxonomists, Carlos Ochoa, passed away in December 2008, at the end of the International Year of Potato declared by the United Nations. Ochoa was born in Cusco, Peru, in 1929. He got his professional education as an agronomist in Bolivia (Universidad San Simon) and the United States (University of Minnesota). He spent some 25 years of his life as a teacher at the National Agrarian University La Molina and 15 years as the head of the Taxonomy Department in the International Potato Center (CIP) in Lima, Peru. Ochoa described some 60 new potato species and authored several comprehensive books about potato taxonomy, the last of which was published in 2006. He also utilized the potato germplasm and began potato breeding in Peru in 1940s. At CIP he established the World Potato Collection which is a gene bank with thousands of wild potato species accessions and landraces of potato. Carlos Ochoa was recognized internationally by many awards, including William L. Brown Award for Excellence in Genetic Resources Conservation by the journal *Diversity*, and named as the Distinct Economic Botanist 1997 by the Society of Economic Botany. The Swedish University of Agricultural Sciences (SLU), Sweden, awarded the title of Honorary Doctor to Ochoa in 2006.

Ochoa's reflections about his life-long commitment to potato taxonomy and breeding can be read at the homepage of CIP:

http://www.cipotato.org/publications/books/potato_treasure_andes_online/21_universal_gift.asp

Jari Valkonen

Information on "Workshop on Organic Potato production"

EAPR 2008, July 8th 2008

Organic potato production in different countries

In the Netherlands the area and the yields are decreasing. Agrico can only sell 4-5 months a year organic table potatoes from the Netherlands, in the other months they have to import from Israel, Italy/Spain or Egypt. Organic starch potato production in the Netherlands has almost disappeared, partly because AVEBE uses the factory in Germany.

In Finland also decreasing areas (excepted starch, which is increasing)

In Germany stable.

In Poland and Latvia organic production is increasing. NB. In Latvia because of governmental support, the market stays behind. Also in Israel a growing area of organic potatoes.

In Germany and Netherlands the demands for organic (processed) potatoes are higher than the production, but because yields, yield stability and revenues are too low less farmers do grow potatoes.

Regionality

Why still grow organic potatoes in a region where the climate is too favourable for late blight and you cannot spray against it???

Local production is important in organic farming!!!

CO₂-footprint of organic potatoes: more or less the same as in conventional potatoes???
(assumption). When you import potatoes from abroad the footprint becomes higher.

Varieties

In the Netherlands at this moment 3 varieties (Biogold, Agria, Ditta) cover 75 % of the organic production. There are some late blight resistant varieties coming up (Toluca: in 2008 16 ha, Bionica, Sarpo Mira for MacCain) but still too little. Most farmers experience the lack of good resistant and organically adapted varieties as the main factor of the decreasing yields in organic potato production. Also in Germany too little resistant varieties are available.

In Poland sufficient resistant varieties against late blight are available. Only in the last year late blight was a problem.

Breeding

In the Netherlands an organic breeding programme for potatoes will be set up, together with Wageningen University, for introgression of late blight resistant genes from wild species, and organic farmers to select in new clones on their own farms. Also the breeding companies are involved.

Agrico/Bioselect has a special organic breeding programme since 1995.

In Latvia varieties have been compared under organic and conventional circumstances: for some traits both systems gave comparable results but for other traits under conventional system more varieties performed well than under organic conditions. Therefore, selection under organic conditions is important.

Important breeding goals (next to general ones as a good yield, quality and appearance) are: resistance against late blight and other diseases such as *Alternaria* and nitrogen efficiency under low input conditions.

We need varieties for all purposes, not only table potatoes but also for crisps, French fries, starch etcetera.

Diseases

Late blight is important, but for example in Poland *Alternaria* (early blight) is a bigger problem, especially on light soils and with low nitrogen availability. In low nitrogen input circumstances *Alternaria* will be a bigger problem in other European countries too, while organic manure is scarce. Other problems are skin diseases (scab, *Rhizoctonia*, silver scurf) because potatoes are more and more washed before being sold.

In the Netherlands *Rhizoctonia* can be managed by using a stronger selection on the limit for acceptability of infection on the seed from max 25 % lightly infected to 10% and by the application of *Verticillium biguttatum* in high class seed. NB. This is very expensive (€200,- / ha!!)

Copper

Equal playing grounds with respect to copper: put a ban on it in total Europe???. This was the intention of the EU, but has not happened. In different countries the amount has been maximized, for example 3 kg/ha/year in Germany. In the Netherlands the use of copper as a fungicide is not allowed anymore. Some farmers did use it last year as a 'plant growth stimulator'. The control body SKAL knows this, but can not do anything against it.

Fertilisation

Timing of fertilisation is difficult with organic fertilisation because mineralization does not always fit the needs of the crop. Some in the audience have the opinion that the potential of the organic potato can not be reached without a quick release fertilisation somewhere half way the crop production. On the other hand there are examples of 35 ton/ha or more with a basic organic fertilisation. (35 ton/ha gives the farmer a solid income. To maintain a good balanced and healthy organic potato growing system 35 ton/ha seems the limit.)

Compost and soil structure: the real problem is mineralization, not the level of nitrogen. Compost enhances soil structure, and thereby improves mineralization.

Not only nitrogen, also potassium may be too low. Causes black spot, bad storability, vulnerable for bruises etc. Patentkali may be used in organic farming, but also slurry or cattle manure can meet the potassium needs of a potato crop.

Irrigation

Because of the climate change irrigation may become of more importance also in potatoes. Does this give problems? When to irrigate, how much etcetera. Waiting until you see water deficiency in the crop is too late. You can use a potential meter. Leaching should not be a problem because you only irrigate enough to make the ridges wet (20 mm). This is not so much water that it can cause leaching. During tuber bulking a water deficit must be prevented.

In organic systems irrigation may be important not only for supplying the crop with water but also with nitrogen and other minerals because mineralization stops when there is a water deficit.

Conclusion

We had a lively discussion on the topic. Everybody was eager to tell about the situation in their own countries. Of course there are differences between the main topics in the different countries and there are still problems to be solved. The two most important topics seem however, resistances against several diseases (with late blight resistance as number 1) and the problem of fertilization. There are possibilities for this in nutrient management and in breeding for efficient varieties as well.

Values in organic farming

The original driving force of organic agriculture was very much value driven: for example balance with the environment. But conventional agriculture nowadays may perform better than organic on this point, for instance 'environment friendly fungicides'. But on the other hand, there is more in organic: sustainable soil management, biodiversity, animal welfare, etcetera. Organic production is not only organic potatoes but is a whole system, and potatoes may not be the best performing crop in this system but still do belong to it.

September 2008

Marjolein Tiemens-Hulscher

Monique Hospers-Brands

Louis Bolk Institute, the Netherlands

Calendar of Events:

Find below some links to web pages where you can find relevant potato events for 2009:

Global Potato News: <http://www.potatonews.com/events/events.asp>

Potato Council:

http://www.potato.org.uk/department/knowledge_transfer/potato_industry_events/index.html

Potato World: http://www.potatoworld.nl/index.php?option=com_eventlist&Itemid=35

Potato Pro: <http://www.potatopro.com/Lists/Conferences/Upcoming%20Conferences.aspx>

Potato Europe 2009: <http://www.potato2009.com/>

EDITORIAL

Dear EAPR members

This is the second issue of the EAPR Newsletter. Our main objective is to introduce this instrument for improving communication between council, section chairman, country representatives and members.

I am sure that we will improve style, format and contents in the following newsletters with your suggestions and contributions.

For the moment we consider the following sections and contents for the EAPR Newsletter:

- News from the Council

In this section council member will contribute periodically some news according to his assigned tasks

- News from the Editor of Potato research

- News from the Section Chairmen

All Section Chairmen are invited to contribute periodically with some section news.

- News from the Country representatives

All Country Representatives are invited to contribute periodically with some country news (Examples: country news with respect to the potato sector, activities in member recruitments, local relevant events, harvest forecasting, climatic disasters,)

- News from the Association Members

The newsletter should be interactive. So the members are also invited to post some news (Examples: presentation of new members, new appointments and nominations of members, passing away of members, local events, projects)

- Other News

(Examples: News from other potato organisations, relevant Project Calls, Funding Opportunities, Jobs, Scientific break throughs, Information on relevant Potato Projects, Press releases about EAPR, ...)

- Calendar of Events

I am looking forward to a fruitful collaboration and particularly to your suggestions and numerous contributions.

Best Regards

Enrique Ritter

Editor of the EAPR Newsletter