Plants for the Future
European Technology Platform

Conference Programme

How to Improve the Flow of Plant Innovation to the European Agriculture

17 May 2011

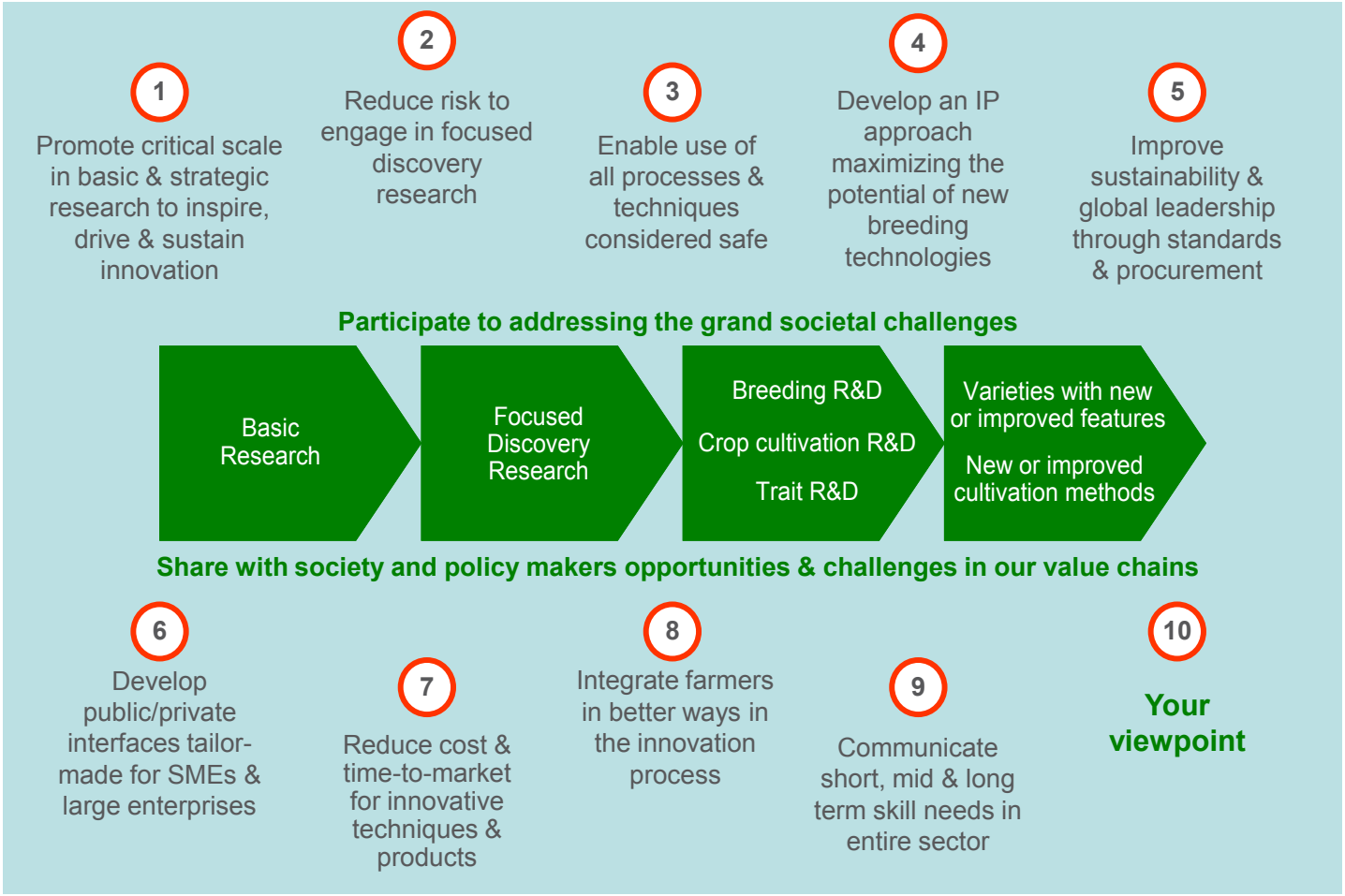
Introduction to the conference

Agriculture needs research and innovation in order to produce more and better while reducing environmental footprint and ensuring its future. The European farming and agro-industry is well positioned to help to solve the major challenges that the plant sector faces such as food security and renewable energy supply.

The purpose of the conference is to identify key areas for improvements. How to address our future challenges? What are the key hurdles and how to overcome them? How could ongoing and future research contribute to promote market driven solutions? How could we optimize the impacts of research on the European agriculture? Which objectives should be fixed to boost innovation in the plant sector? How can stronger involvement of stakeholders be promoted on cross-cutting issues and grand societal challenges?

The event aims to bring together leaders of large European companies which are active in the agricultural sector, small and medium sized enterprises developing research programmes, professionals working in agriculture, the main players from the academic world and, policy makers and responsible from funding schemes and European initiatives in order to collaborate in the frame of the future European Innovation Partnership / FP8. The European Technology Platform 'Plants for the Future' (Plant ETP) plans to outline the Strategic Research Agenda (SRA) action plan for the period 2011-2016. Plant ETP particularly focus on promoting a Research Action Plan and an Innovation Action Plan for the plant sector.

Which actions would stimulate plant-based innovation?



The purpose of the conference is also to get feedbacks and opinions from the participants, please send your comments/additional actions to silvia.travella@plantetp.org

Disclaimer: *The numbers in this figure do not reflect priority and/or order of appearance in the value chain*

Conference Programme









Venue: Copa-Cogeca, rue de Trèves 61, 1040 Brussels

11h00 - 11h10 **Opening and Introduction**, ***Marc Cornelissen***, *Chair of Plant ETP*

11h10 - 11h20 **Welcome Speech**, ***Arnaud Petit***, *Director at Copa-Cogeca*

11h20 - 11h40 **"Need for Research and Innovation from the Farming Sector"**
Christian Pèes, *President of Euralis Group, Vice-President of Cogeca*

11h40 - 12h00 **"Competitiveness of European Plant Research: Basis of Innovation"**
Ulrich Schurr, *Jülich Research Centre, Vice-President of EPSO (European Plant Science Organisation)*

12h00 - 12h20 **"Plant Innovation in Europe: What is at Stake"**
Joachim Schneider, *Head of Bioscience, Bayer CropScience*

12h20 - 12h40 **"Plans to Improve Research and Innovation in Europe"**
Patricia Reilly, *European Commission, Cabinet of Commissioner Geoghegan-Quinn for Research and Innovation*

12h40—13h00 Discussions

13h00 - 14h00 Lunch Break Networking

14h00 - 14h20 **"Programme of the Hungarian Presidency to Promote Research and Innovation in the Agricultural Sector"**
Sándor Fazekas, *Hungarian Minister for Rural Development*

14h20 - 15h50 **Panel discussion on the Future EU Policy on Research and Innovation in Plant Sciences and Agriculture**
Moderator: **John Hodgson**, Managing Editor of Scrip Intelligence

- *Farmers:* ***Jean-François Isambert***, *Secretary General of the French Wheat Producers Association (AGPB) and Vice-President of Copa-Cogeca Working Parties on Cereals*
- *Universities - Research Institutes:* ***Heribert Hirt***, *President of EPSO (European Plant Science Organisation)*
- *European Plant Breeding Industries:* ***Christoph Amberger***, *President of ESA (European Seed Association)*
- *Food Industries:* ***Pierre Broun***, *Head of Nestlé R&D Center Tours*
- *Processing Industries:* ***Matthias Moser***, *Head of Südzucker Group Corporate R&D*
- *European Commission:* ***Timothy Hall***, *DG Research and Innovation, Head of Unit, Agriculture, Forest, Fisheries, Aquaculture*

15h50 - 16h00 **Closing and Next Steps**, ***Marc Cornelissen***, *Chair of Plant ETP*

16h00 - 17h00 Cocktail

Speakers

Marc Cornelissen

Marc Cornelissen was appointed Head of BioScience Research Operations at Bayer CropScience on October 1, 2003, and is based in Ghent, Belgium. He is chair of the ETP "Plants for the Future" since April 2009.

Marc Cornelissen studied genetics and biochemistry at the Radboud University in Nijmegen, the Netherlands. He specialized in molecular genetics at the EMBL in Heidelberg, Germany, and did his PhD on plant gene silencing at the University of Gent in Belgium.
In 1984, Marc was one of the first to join the Plant Engineering department of the Belgium start-up company Plant Genetic Systems. From 1992 onwards, Marc headed Basic Research that focused on plant gene expression, high quality corn transformation, hybrid seed production technology and insect resistance. Following the acquisition of Plant Genetic Systems by AgrEvo in 1996, Marc became responsible for Basic Research in Crop Improvement. The goal of the department was to prepare the company for the development of second generation biotech products and test utility of enabling technologies such as gene replacement and mini-chromosomes.
When in December 1999 Aventis CropScience was formed through a merger of AgrEvo and Rhone-Poulenc, Marc was appointed head of the Technology Discovery within the newly formed business division Crop Improvement. This department explored emerging trait technologies and integration of new technologies such as molecular breeding and also set up a company-wide bioinformatics platform. After the acquisition of Aventis CropScience by Bayer, Marc was appointed in his current role.

Christian Pèes

Since 2000, Christian Pèes has been Chairman of the Board for the Euralis Group. In this post, he has promoted the cooperative model, continuing to defend its value as he has done since beginning work in the agricultural sector over 20 years ago. Based in Lescar (FR), the cooperative represents 15,000 farmers and a further 5,000 employees, reconciling the principles of longevity, solidarity and competitiveness. Founded in S.W. France, Euralis expanded both nationally and internationally and it has now a turnover of €1.3billion.
Through Euralis, Christian Pèes has highlighted the significance of the cooperative model, proving its economic efficiency whilst at the same time maintaining a close working relationship with its members. The Euralis Group is the leading global producer of foie gras, the leading French maize producer and the leading supplier to Bordeaux and Bergerac wine producers. As such, it is considered a leading operator on the European agricultural and agri-food markets. Whilst firmly rooted on home soil, the group has not hesitated in establishing ties with China, Canada and Ukraine in order to represent the interests of its members as best as possible. The group remains keen to use growth markets in order to diversify, which was demonstrated when it took a majority equity stake in the Stalaven Group, the leading caterer to cover the full menu, from starter to dessert.
Christian Pèes has a strong awareness of global issues and his work with Momagri has focused on actively fighting against unregulated market liberalisation, as promoted by the WTO. In his book "L'arme alimentaire (Food as a weapon)", published in 2006 by Cherche Midi, he revealed how agriculture could be one of the drivers of our economy, at a time when we are confronted by two fundamental questions: how to feed a global population expected to reach 9 billion by 2050 and how to respond to our energy needs.

Ulrich Schurr

Career Milestones :

1988 Academic education (Biology in Bayreuth)

1991 PhD Thesis (Effect of soil drought on xylem and phloem transport in Ricinus communis and its importance for root-shoot interaction; University of Bayreuth)

2001 Group leader at the Institute of Botany, University of Heidelberg

Since 2001 present:

Director of the Institute for Chemistry and Dynamics of the Geosphere: Institute Phytosphere, Forschungszentrum Jülich

Member Executive Board since 2008; Vice President of the European Plant Science Organisation (EPSO)

Research Director for the Division Environment of Forschungszentrum Jülich

Member of the Executive Board of the European Technology Platform 'Plants for the Future'

Member of the Steering Committee of the European Technology Platform 'Biofuels'

Member of the Workgroup Plant Innovation of the German Bioeconomy Council (Bioökonomierat)

Chairman of the Executive Board of the Bioeconmy Science Center (BioSC)

Joachim Schneider

Dr. Joachim Schneider was appointed Head of BioScience at Bayer CropScience on November 1, 2006, and is based in Lyon, France. He has represented Bayer on the Food and Agriculture Section Governing Board of BIO, the Biotechnology Industry Organization since 2007.

Dr. Joachim Schneider was born in Bensberg, Germany, in 1956. After studying agricultural engineering in Bonn, Germany, and gaining his PhD in plant pathology from the University of Gießen and the University of the South Pacific in West Samoa, he started his career in Research and Development in 1984 with Bayer's Crop Protection Business Group in Monheim, Germany. In 1990, he went to Kansas City to work at Miles Corporation, a U.S. subsidiary of Bayer, for four years, ultimately as Head of Product Development. In 1994, he returned to Monheim, as Head of Biological Development - Herbicides. After various strategic assignments, he was appointed Head of the Herbicides Business Unit. in 1998. In 2001 he transferred to Bury St. Edmunds, United Kingdom, where he held responsibility for Bayer's crop protection business in the United Kingdom and Ireland. Following the establishment of Bayer CropScience in 2002, he was appointed Country Head for the United Kingdom and Ireland and Managing Director of Bayer CropScience Ltd. in Cambridge, United Kingdom.

Patricia Reilly

Patricia Reilly qualified as a veterinary surgeon from University College Dublin in 1996, and worked in mixed clinical practice until 2001, when she joined the Irish Department of Agriculture, Fisheries and Food. In 2004 she joined the Irish Embassy in Warsaw as Ireland's first Agricultural Attaché to Poland. On return to the Department of Agriculture in 2008, she re-joined the National Disease Control Centre, where her work involved veterinary international trade policy and contingency planning.

Patricia is a graduate of the King's Inns, Dublin, and other academic qualifications include an MSc in European Food Regulation and a Diploma in European Law from the Law Society of Ireland.

Patricia joined the Cabinet of Commissioner Máire Geoghegan-Quinn in February 2010, and is responsible for the portfolio 'Science and Society'.

Sándor Fazekas

Political career: Held the post of the mayor of Karcag from 1990 to 2010. Was member of the County Municipal Council during the periods 1994 to 1998 and 2002 to 2006. Worked as Member of Parliament between 1998 and 2002, holding the position of assistant leader of the FIDESZ parliamentary group. Worked as the member of various parliamentary committees, including the National Security Committee, the Statutes Committee and the Immunity, Incompatibility and Mandates Committee. In the 2006 parliamentary elections, obtained a seat in Parliament on the regional list of Jász-Nagykun-Szolnok County. During the periods 30 May 2006 to 17 September 2007, end of the parliamentary term, was the member of, respectively, the Budget, Finance and Audit Committee and the Committee for Human Rights, Minority, Civil and Religious Issues.

At the 2010 parliamentary elections, renewed his seat in Parliament on the regional list of Jász-Nagykun-Szolnok County. Has been Assistant Chairman of the Municipal Section of FIDESZ – MPSZ and member of the Municipal Council in the Karcag individual municipal district since 1990 to the present.

From 29th May 2010, he is minister for rural development in Hungary.

During the Hungarian Presidency of the Council of the European Union (2011.01.01.- 2011.06.30.) he is the President of the Agriculture and Fisheries, as well as the Environment Council.

Jean-François Isambert

Career Milestones :

1976 Academic education (Agriculture Technology)

Since 1980:

- Wheat & oilseed rape grower, farming 280 hectares, Evry, FR
- Agricultural Consultant, specializing in audit and control
- Judge in Agricultural section of 'Conseil de Prud'hommes' at court of Evry, FR (until 2009)
- Grain grower, farming 1500 hectares, Constanta, Romania
- Vice-chairman of AGRALYS, agricultural cooperative resulting from the merger of Le Dunois, Ligea, Artenay and Agralys Union in Eure-et-Loire FR
- Secretary General of AGPB (Association Générale des Producteurs de Blé et autres céréales) and ORAMA (umbrella organisation of AGPB with the farmer unions for maize, oilseeds and protein crops)
- Vice-chairman of UNIGRAINS, the investment bank of the French cereal growers
- Member of Management Board of Arvalis, France Export Céréales, Intercéréales, Agricéréales, Messis Finances, Unifipar, Nord-ETBE, Ouest-ETBE
- Chairman of regional federation of agricultural cooperatives, Ile-de-France
- Chairman of regional cereal Committee of France AgriMer, Ile de France
- Member of the Board of Club Demeter
- Corresponding Member of 'Académie d'Agriculture de France'

Heribert Hirt

Career Milestones :

1981	Academic education (Biochemistry in Vienna, AU)
1987	PhD Thesis (Isolation and Characterization of the Human Growth Hormone Gene Locus; Inst. of Biochemistry, Vienna, AU)
1991 – 1997	Assist. Prof. at Inst. of Microbiol. and Genetics, Univ. of Vienna
1999 – 2001	Vice-chair of Institute of Microbiology and Genetics
2002 – 2004	Vice Director of Gregor-Mendel-Institute of Plant Molecular Biology, Austrian Academy of Sciences
2002 – 2003	Dean of graduate studies of the international PhD program of the Vienna Biocenter
2002 – 2006	Committee member of MASC (Multi-National Arabidopsis Steering Committee)
2002 – 2005	Executive board member of the Austrian Society of Genetics and Gene Technology
2005 – 2007	President of the Austrian Society of Genetics and Genetic Engineering ÖGGGT
2006 – 2007	Head of Dept. of Plant Molecular Biology, University of Vienna
Since 2008	Director of the URGV Plant Genomics Research, Paris, France
Since 2010	President of the European Plant Science Organisation,EPSO

Christoph Amberger

Christoph Amberger, 1957, studied Agriculture at the Universities of Göttingen and Munich. In 1986 he earned his doctoral degree at the Technical University of Munich. From 1986 to 1991 he began his professional career at Bayer AG, Leverkusen and Bayer Italia Spa, Milano, in the business unit “crop protection”. In 1991 he became Managing Director of Lochow-Petkus GmbH, Germany, a subsidiary of KWS SAAT AG and a leading company for cereal seeds in Europe. He has been a Member of the Executive Board of KWS SAAT AG with the responsibility for corn, cereals and marketing since 2001. In 2009 he was elected president of ESA (European Seed Association). KWS is a worldwide leading seed company for agricultural crops with a turnover of more than 750 mill. EUR.

Pierre Broun

Career Milestones :

1987	Academic education (Agronomy in Paris-Grignon, FR)
1994	PhD Thesis (Cornell University, USA)
1987-1989	Consultant, CEERIS Environmental impact studies
1994-1997	Postdoctoral scientist, Carnegie Institution of Washington, Stanford University, USA
1997-1999	Senior Scientist Mendel Biotechnology, Inc, Hayward, CA, USA
1999-2003	Team Leader, Mendel Biotechnology, Inc, Hayward, CA, USA
2003-2007	Professor, Centre for Novel Agricultural Products, University of York, UK
Since 2007	Head of Nestlé R&D Center, Tours, FR
	Member of the Steering Council of the European Technology Platform ‘Plants for The Future’
	Member of the American Association of Plant Biologists

Matthias Moser

Career Milestones :

1994	Academic education (Chemistry in Würzburg, DE)
1998	PhD Graduation “Dr. rer. nat.” Ludwig-Maximilians-Universität München, DE
1998-2001	Production engineer, Regensburg Plant, Südzucker AG, Regensburg, DE
2001-2003	Group leader “Sugar Specialties” at Südzucker AG, Central Department Research, Development, and Services (ZAFES), Obrigheim, DE
2003-2006	Project Manager at Südzucker/Orafti, Erection of a Production Plant for Inulin/Oligofructose at Pemuco, Chile
2006-2007	Vice President R&D at Südzucker AG, Central Department Research, Development, and Services (ZAFES), Obrigheim, DE
Since 2008	Head of Südzucker Group Central Department Research, Development, and Technological Services (CRDS) and Member of the Executive Board Beneo Group, Mannheim, DE

Timothy Hall

T.J. Hall obtained his PhD in plant pathology from Manchester University in 1976 and then worked as a research scientist in the Glasshouse Crops Research Institute, Littlehampton, UK before joining the Commission services in 1983. He became Head of Unit for Scientific and Technological Cooperation with Developing Countries in 1994, and has also headed units in the Quality of Life Directorate under the 5th Research Framework Programme (FP5) and in the Health Directorate under FP6.
His current position (since October 2006) is Head of Unit for Agriculture, Forestry, Fisheries and Aquaculture Research with primary responsibilities for overseeing collaborative research and coordination activities related to «Sustainable production and management of biological resources from land, forest and aquatic environments» in FP7. He was also Interim Director for «Biotechnologies, Agriculture, Food» from September 2007 to June 2009.

The European Technology Platform 'Plants for the Future' - A European partnership for research, development and innovation

By Silvia Travella, Coordinator of the 'Plants for the Future' ETP

The European Technology Platform 'Plants for the Future' (Plant ETP) is **a stakeholder forum for the plant sector** with members from **industry** (European Seed Association and individual companies), **academia** (European Plant Science Organisation) and the **farming community** (Copa-Cogeca). It offers its stakeholders a platform to provide their views and to represent their interests in an open discussion process. It provides a **20-year vision** and a short-, medium- and long-term **Strategic Research Agenda** (SRA) for Europe's plant researchers.

In addition, the platform is frequently in dialogue with European bodies such as the European Commission and the European Parliament. Topics include the importance of setting focus in European plant research, the use of safe breeding technologies, and the need for improvements in the policies to facilitate the flow of products to the market. The importance of plants today and in the future is best expressed in the vision of a **Knowledge-Based Bio-Economy (KBBE)**, in which plants are a main pillar.

Agriculture is one of the **major drivers shaping** the European rural landscape. Moreover, the agri-culture dependent sector in its entirety is the largest sector of European industries illustrating its enormous role for employment and its socio-economic dimension.

The **goal** of the Plant ETP is to maximize **competitiveness of European research and innovation** in the plant sector while helping to **address** the major **global challenges:**

- Meet the increasing demand for more food and feed, with higher qualities, health benefits and more diversity;
- Develop plants as green factories for bio-materials, pharmaceuticals and bio-energy;
- Achieve more environmentally friendly agricultural production while reducing and optimising the environmental impact of agriculture; produce more efficient plants, including the improvement of plant productivity and qualities as well as the enhancement of the biodiversity.

Agriculture needs research and innovation in order to produce more and better while reducing environmental footprint and ensuring its future. The European farming and agro-industry is well positioned to solve these challenges. The Plant ETP Vision paper and the Strategic Research Agenda have been delivered in 2004 and 2007 respectively. The challenge of today is to translate this Strategic Research Agenda (SRA) into **a Research Action Plan** (RAP), and define priorities and instruments for its implementation. In parallel, the ETP is developing **an Innovation Action Plan** (IAP) to promote within Europe a better flow from innovation concept to marketable product, and **an Education Action Plan** (EAP) to secure the development of the required human resources, skills and capabilities for research, industry and the farming community.

Research in Europe for a competitive and vibrant plant sector helping address societal challenges – Strengthening and bringing together European, multinational, national and regional efforts in the plant sector and beyond

By Karin Metzlaff, European Plant Science Organisation (EPSO), Member of the 'Plants for the Future' ETP Executive Committee

Our societies are facing major **challenges** such as food security, sustainable agriculture, climate change and public health. The plant sector in Europe has the potential to help addressing these as a major contributor: in the next 50 years we have to produce more and healthier food than ever before on less land per capita with less water, energy and chemicals. In addition plants become a key resource for biomass and high value products helping to shift from a fossil-based to a bio-based economy. In doing so, the plant sector will integrate increasingly with other sectors in the bioeconomy web along the food and non-food webs, and beyond, for instance with the pharmaceutical sector.

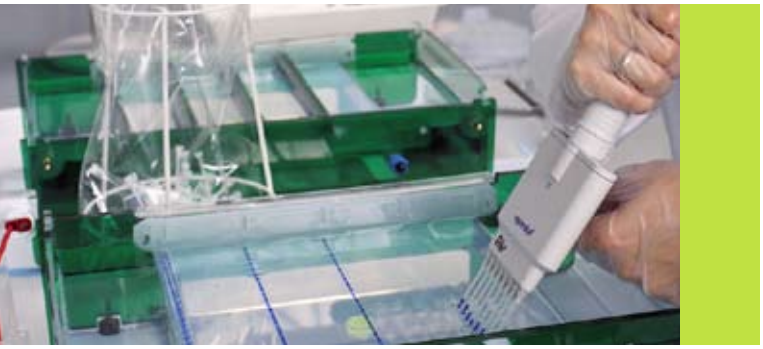
To develop and use the full potential, **critical mass research efforts** from the local to national, multi-national and European level - even joining or leading global efforts - will be imperative. Europe has come a long way in the past decades. However, other leading and emerging economies ranging from the USA, Canada, Australia, to China, India and Latin America, invest in and structure their plant research at unprecedented levels and speed.

Europe's scientific community in the public and private sector is ready and eager to be a strong global contributor and develops with its partners from industry and farming communities in the European Technology Platform 'Plants for the Future' **recommendations** for all levels. For instance, Plant ETP submits annually its highest priority research topics to the European Commission and is regularly consulted by the European Research Area Network (ERA-Net) in the plant sector formerly on plant genomics (ERA-PG) and hopefully soon on plant sciences (ERA-CAPS). Recently, Plant ETP and its member organisations submitted input to the European Commission's consultation on the Green paper on a Common Strategic Framework for future EU Research and Innovation Funding (Ref. 1 to 3).

These recommendations include first a strong component of **curiosity driven as well as strategic research of individuals** (an excellent example is the ERC at European level) **as well as teams** (such as collaborative projects) **to inspire, drive and sustain the plant sector** in Europe. Good examples for collaborative projects need to be continued with much stronger effort at European level in the Framework Programme, in the ERA-Networks (ERA-PG and ERA-CAPS), likely in future as well in the European Institute of Technology (EIT) and the Joint Programming Initiatives. It is important that the collaborative scheme includes as well curiosity driven research as done at national (e.g. DFG in Germany) and multinational (e.g. ERA-Net) levels, unfortunately less so at European level which needs to be strengthened again.

Second, the **knowledge transfer** from research projects at any level towards the users in the farming communities and industries needs a boost. To do so, traditional instruments neglected in the past decade need to be strengthened again - such as extension services and experimental farms. New instruments need to be developed which could be tailor-made analytical and communication services extracting relevant information from past, finishing and on-going research projects, presenting them to the user and bringing interested users together with researchers to proceed to the next steps, such as demonstration projects, pilot plants, experimental farms. A prerequisite for knowledge transfer and use is an innovation friendly, stable and reliable **innovation framework** that is described in the innovation chapter.

Third, as mentioned already, the successful plant sector is not working in isolation, but is a strong and intrinsic part of the bioeconomy web. This interaction is only starting and needs incentives by providing resources for **multi-sectorial research projects** at local, national through to the European levels encompassing the food web, the non-food web, the plant – food – health sector and the plant and pharmaceutical sectors respectively. This is elaborated in more detail in the White Paper "The European Bioeconomy in 2030" of the EU project BECOTEPS (Ref. 4)



Fourth, Europe needs a stronger framework to pool the various national and possibly European funds to enable Europe to participate in a timely manner in major **global initiatives** and retain competitiveness. As appropriate, Europe should take a leading role. Stakeholders in the plant sector already are pro-active in global activities, for instance EPSO is a founding member of the Global Plant Council and engaged in the activities of the Strategic Forum on International Cooperation (SFIC).

Finally, as pointed out by several Commissioners with the Green Paper on a Common Strategic Framework for future EU Research and Innovation Funding (Ref. 4), the various **funding sources for research and innovation in Europe** should be better aligned to create a Common Strategic Framework at European level. These include the Framework Programme (FP), the Competitiveness and Innovation Programme (CIP), the European Institute for Innovation and Technology (EIT), the R&D component of the Cohesions Fund, and we propose to consider in a similar way as well the future Common Agricultural Policy (CAP) regarding activities for the benefit of agriculture and the Development Programme regarding activities for humanitarian aid.

References:

(1) Green Paper on a Common Strategic Framework for future EU Research and Innovation Funding, 9 February 2011 (http://ec.europa.eu/research/csfri/index_en.cfm)
(2) Input to the future EU research and innovation funding programmes, EPSO 14 April 2011 (http://epsoweb.org/webfm_send/415),
(3) Input to the Bioeconomy, EPSO 2 May 2011 (http://www.epsoweb.org/webfm_send/421),
(4) BECOTEPS White Paper, March 2011 http://www.plantetp.org/index.php?option=com_docman&task=doc_download&gid=147)
(5) Plants for the Future, Strategic Research Agenda 2025, Plant ETP 2006 (http://www.plantetp.org/index.php?option=com_docman&task=doc_download&gid=13)
(6) 2025, a European Vision for Plant Genomics and Biotechnology', Plant ETP 2004 (http://www.plantetp.org/index.php?option=com_docman&task=doc_download&gid=11)

Europe 2020 Flagship Initiative – Innovation Union, Turning Ideas into Jobs, Green Growth and Social Progress

By Silvia Travella, Coordinator of the 'Plants for the Future' ETP

Innovation has been placed at the **heart of the Europe 2020 strategy** with the **Innovation Union** as one of the seven **flagship initiatives** for a smart, sustainable and inclusive economy. Innovation is the key not only to **creating more jobs, building a greener society and improving our quality of life**, but also to maintaining our **competitiveness** on the global market.

With over thirty action points, the Innovation Union aims to do three things:

1. Make Europe into a **world-class science performer**;
2. **Remove obstacles to innovation** – like expensive patenting, market fragmentation, slow standard-setting and skills shortages – which currently prevent innovative ideas to be turned into products and brought quickly to market;
3. **Revolutionize the way public and private sectors work together**, notably through **Innovation Partnerships** between the European institutions, national and regional authorities and business.

The European Technology Platform 'Plants for the Future' (Plant ETP) supports the Innovation Union. Overcoming fragmentation and duplication, facilitation of technology transfer, and the establishment of an enabling framework in the widest sense have also been identified by Plant ETP as the major challenges for innovation in the plant sector. Plant ETP supports in particular the creation of a **European Innovation Partnership (EIP)** in the agricultural sector with food security and climate change as the two most significant growing societal challenges to address. The European farming and agro-industry is well positioned to solve these challenges.

European agriculture needs research and innovation in order to produce more and better while reducing its environmental footprint. Agriculture at the same time is one of the major drivers shaping the European rural landscape. The agri-culture dependent sector in its entirety is the largest sector of European industries illustrating its enormous role for employment and its socio-economic dimension. To put in future innovative ideas in place, "advice services" are needed to transfer know-how to the farm level. Researchers, advisors and farmers have to be brought together to ensure that innovation-oriented research become a reality.

The European Innovation Partnership (EIPs) will test a new approach to EU research and innovation. Innovation will be the overarching policy objective with a medium- to longer-term perspective and with policy instruments, measures and funding all designed to contribute to innovation. This requires that EU and national/regional policies are closely aligned and mutually reinforcing, and last but not least, that the highest political level sets a strategic agenda, regularly monitors progress and tackles delays. EIPs aim to bring together all European key players from researchers, businesses to end users and to remove bottlenecks so that the better ideas can be successfully translated into innovative products or services. The EIPs aim to tackle major societal challenges whilst creating new business opportunities for EU industry across the whole research and innovation chain and set concrete targets behind which policy makers and the public can rally. A pilot partnership on Active and Healthy Ageing has been launched in 2011. Other innovation partnerships (e.g. on energy, raw materials, sustainable agriculture, water) are under consideration.

Novel Food, New Breeding Techniques, GMOs… - is there any future for innovation in Europe's agriculture?

By Garlich von Essen, ESA European Seed Association, Member of the 'Plants for the Future' ETP Executive Committee

Years of talks between European Parliament and EU Member States on a new regulation on novel foods finally collapsed on March 28, leaving the issue on how to regulate the development and marketing of food products resulting from innovative technologies wide open. Main reason for the breakdown was the Parliament's insistence on a ban on food from cloned animals and their descendants, motivated by its perception of a negative public attitude towards the technology highlighted in a recent "Eurobarometer" survey. Member States and Commission argued that such a ban would be impossible to implement and enforcement would be technically unfeasible in practice, irrespective of possible EU labelling provisions as third countries would not apply the same approach to such products, and that a ban of imports would not be compatible with the international trade rules that the EU has signed up to - with the European Parliament's explicit consent. The failed negotiations now leave the old Novel Food Regulation in place, which had been put up for revision mainly to provide more legal certainty and to promote innovation in food production. The failure of talks also means that proposed rules in other areas such as innovative breeding techniques and Nano-materials will not (yet) come into force.

But there are worrying signals that this may only be a matter of time: experts from EU Member States as well as the EU's Joint Research Centre (JRC) are currently discussing the regulatory status and possible extension of requirements for numerous modern plant breeding techniques such as Reverse Breeding, cisgenesis, targeted mutagenesis and many more. And the Commission has been quick to assure that a new proposal to regulate Novel Foods, i.e to subject them to stringent safety assessment, authorisation and possibly traceability and labelling requirements, will be put forward soon. This policy approach is much

in line with the EU's still on-going debate on the use of biotechnology in general and most specifically GM technology in its agri-food production chain. Here as well, science plays a minor role in the discussion. While evidence of the safety and usefulness of GM crops is literally growing on around 150 million hectares each year, Europe finds ever new reasons to deny its breeders, farmers, growers and food producers access to this technology. All in all, it seems there is little hope for innovation in European plant breeding and crop production. At the same time, the EU continues to promote its general objective of becoming the most innovative Knowledge-Based Bio-Economy on the planet, and still co-funds numerous R&D projects in the respective areas of science and technology.

Europe's plant breeding industry always insisted that only such novel products that are substantially different from existing ones should be regulated. We still fear that science, practicality and fair competition will be pushed to the side lines by regulatory overkill concepts. If Europe's plant breeders will become subject to new requirements and rules wherever they make use of modern breeding techniques in the development of new plant varieties, irrespective of the nature of the final product, innovation will be stigmatised and its competitive advantages undermined. ESA has repeatedly underlined that such EU requirements would not be enforceable for imports as most third countries don't see a need for specific rule. But also it is impossible to detect or differentiate products that result from new breeding techniques. It would thus be misleading to single out some products just because of their production technology, even where the end product is exactly the same as any other. As an industry, we fear that the EU approach will effectively discourage innovation and, after GM crops, well drive yet another set of modern technologies out of Europe – only to see the resulting products being imported without such rules and associated costs applied to them.

Together with farmers and public research institutes, ESA and a number of individual plant breeding companies are trying to address the consequences that such loss and lack of innovation will have on the entire EU agri-food chain, for European consumers, but also for the EU's contribution to the resolutions of some of the greatest challenges of our times: preservation and sustainable use of natural resources to produce more food at affordable prices for the growing world population. "More and better" are the key words in this challenge and genetic progress is the key to meet it. Today's high level conference is bringing leading experts, business representatives and policy makers together in Brussels to address these and many other points in the common quest of promoting plant breeding innovation. But clearly, more than a one-off event is needed to change the tide. Plant breeders, farmers and food producers must continue to join forces in explaining the need for and crucial role of innovation in their commitments to sustainability, safety and their contributions to the greening of our economies, improvement of food security and preservation of resources; and of a suitable regulatory requirement that promotes such innovations instead of hindering them or rendering them economically unviable. Only if we succeed, we will be able to free the impressive innovative capacity of Europe's plant scientists, plant breeders, farmers and food producers. And only then, will Europe stand a chance in meeting its self-proclaimed policy objective and truly become the Knowledge-Based Bio-Economy of the 21st century.

The Common Agricultural Policy post-2013

By Silvia Travella, Coordinator of the 'Plants for the Future' ETP, based on Copa-Cogeca's publications

The Common Agricultural Policy (CAP) is **one of the key European Union policies**. When it was first established in 1958, the aim was to rebuild the agricultural sector after the war so that consumers could rely on stable supplies of affordable food. The CAP encouraged greater agricultural productivity and maintained a level of prices which gave farmers a more predictable and stable income.

Since its conception, the CAP has regularly changed in response to changing world conditions and societal concerns and expectations. By the 1980s, the EU had met its objective of **greater self-sufficiency**, and people in Europe had grown accustomed to having a wide choice of food in the shops. As a result since the 1990s, the emphasis of the CAP has been towards meeting other concerns of society: **food safety and quality**, **environment**, **countryside and rural development** in general. In fact, the CAP has changed to such an extent that today most of the tools which were designed to achieve market stability have been dismantled and the production of food is more or less left to market forces. World conditions will continue to change and **today new challenges are again at the horizon**. A dynamically managed CAP will be essential for future generations of men and women to continue farming in a way that meets society's expectations.

The Common Agricultural Policy accounts for nearly 50% of the EU's budget and aims to provide farmers with reasonable standards of living, consumers with quality food at fair prices and to develop and preserve rural areas. **The CAP impacts directly on availability and price of feedstock**, which is key to the development of the whole plant sector.

The European farmers and their cooperatives play a vital role in producing food and services for 500 million consumers. They are being confronted with more and more challenges, notably **extreme price volatility**, **costly regulations and obligations** as well as the **fight against climate change**. A strong CAP, which maintains direct payments to farmers to ensure them a fair and stable income in the future, is consequently more important than ever.

A **dynamic and competitive agricultural sector**, which provides employment for nearly 30 million people, also has an indispensable role to play in the EU's new **2020 strategy** for jobs and growth. The CAP can also help farmers and cooperatives to contribute positively to combating climate change. A strong CAP, with an adequate budget, will be in future more essential than ever if farmers are to continue to provide these wide-ranging benefits and to contribute to meeting the challenges facing Europe in the years to come.

The **future CAP** should **be based on the following principles**:

- The vital nature of the **economic role of farmers** - providing essential food supplies - and their wider role meeting society's territorial, environmental and social objectives distinguishes it from other economic sectors;

- The CAP of the future should recognise that **farmers are entrepreneurs** and wish to obtain a large proportion of their income as possible from the market. However, it should also be clearly recognised that farmers provide services, some of which are not currently adequately remunerated via the market and others which will never be;

- **Agriculture** should **contribute to the reinforcement of the European Union** - the CAP must remain a common policy with common rules to ensure that competition within the single EU market is not distorted, while taking into **account the diversity of European agriculture**;

- **Financial solidarity** is necessary to ensure greater economic and social cohesion and integration throughout the EU-27 and greater rural/urban balance.

Plant ETP, the European Technology Platform 'Plants for the Future', is a stakeholder forum for the plant sector with members from industry (European Seed Association and individual companies), academia (European Plant Science Organisation) and the farming community (Copa-Cogeca). It offers its stakeholders a platform to provide their views and to represent their interests in an open discussion process. It provides a 20-year vision and a short-, medium- and long-term Strategic Research Agenda (SRA) for Europe's plant sector setting out a consensus on the research needed to fulfil the vision. In addition, the platform brings key issues to the attention of European bodies. These issues include the growing importance of plants and plant sciences to tackle the future challenges for our societies and the crucial support for efforts to give plants an adequate standing and importance in the public view and the political perception.

http://www.plantetp.org

ESA, the European Seed Association, is the single voice of the European seed industry, representing the totality of the European seed sector active in research, breeding, production and marketing of seeds towards the EU institutions and relevant national and international bodies. It is a growing association, attracting a steadily increasing and diverse membership from European seed industry and beyond. Today, ESA represents more than 35 national seed associations and more than 60 direct company members.

http://www.euroseeds.org/

EPSO, the European Plant Science Organisation, is an independent academic organisation that represents more than 223 leading academic research institutes, universities and departments from 30 countries. Together they represent over 28000 plant researchers and staff. In addition, EPSO has over 2850 personal members. The mission of EPSO is to promote plant science and plant scientists, to represent plant scientists in discussions about future plant science programme priorities across Europe, to provide an authoritative source of independent information on plant science, and to promote training of plant scientists to meet 21st Century challenges in breeding, agriculture, horticulture, forestry, plant ecology and sectors related to plant science.

http://www.epsoweb.org

Copa-Cogeca is the united **voice of farmers and agri-cooperatives** in the EU. Together, they ensure that EU agriculture is sustainable, innovative and competitive, guaranteeing food security to half a billion people throughout Europe. Copa represents over 13 million farmers and their families whilst Cogeca represents the interests of 38,000 agricultural cooperatives. They have 72 member organisations from the EU member states.

http://www.copa-cogeca.eu