



# European Consortium for Organic Plant Breeding

## ECOPB Newsletter March 2015

### NEW MEMBERS

We would like to extend a warm welcome a number of new members of ECOPB:

- **Véronique Chable (INRA Rennes, France).**

#### **Associate member**

Véronique Chable is a senior scientist/research engineer with an HDR (Habilitation à Diriger les Recherches), based at INRA, Rennes. She has led research programmes on *Brassica* genetic resources and cauliflower breeding, including genetic, epigenetic and plant development aspects. Commencing in 2001, she has established Participatory Plant Breeding (PPB) projects for organic and low input agriculture with French farmer networks across several crop species. Véronique has coordinated a number of EU projects, including Farm Seed Opportunities-FP6 (2007-2010) and SOLIBAM-FP7 (2010-2014). Following on from this, she is now coordinator for DIVERSIFOOD, a H2020 funded project which will run from 2015-2019.

Website: [www.inra.fr](http://www.inra.fr)

- **Pedro Mendes Moreira (Escola Superior Agraria de Coimbra-IPC-ESAC, Portugal)**

#### **Associate member**

Pedro Mendes Moreira is an agronomist and assistant professor in the Department of Agronomy, at ESAC, Portugal. His research interests include Participatory Plant Breeding, in particular focussing on traditional maize landraces, and strategies for the conservation of genetic resources (e.g. using urban agriculture and social farming). He participated in the VASO project and SOLIBAM amongst others.

Websites: <http://orcid.org/0000-0001-7809-1115>; <http://www.researcherid.com/rid/D-4663-2009>; [www.wix.com/pmm919256447/Pedro-Mendes-Moreira](http://www.wix.com/pmm919256447/Pedro-Mendes-Moreira)

- **Péter Mikó and Mária Megyeri (Hungarian Academy of Sciences, Martonvásár, Hungary)**

#### **Associate members**

Péter Mikó and Mária Megyeri are both based at the Department of Plant Genetic Resources and Organic Breeding at the Agricultural Institute of the Centre for Agricultural Research, Hungarian Academy of Sciences in Martonvásár, Hungary. They work on cereal breeding (wheat; alternative cereals; einkorn, emmer; maize; green forage crops; soybean) under low-input and certified organic conditions in order to optimize the development of varieties that would be suitable for such farming systems. Their expertise includes variety maintenance, performance testing, gene bank research and molecular cytogenetics.

Website: <http://www.mqki.hu/start.php?lang=en>

- **Alexandra Costa (Agrobio, Portugal)**

#### **Associate member**

Alexandra Costa is based at AGROBIO which is a non-governmental organization, founded in 1985. For many years, AGROBIO has been engaged in national research, trial and demonstration projects which aim to develop technical solutions for organic farming. In this context, they have coordinated several national projects, always in cooperation with universities, regional departments of the Ministry of Agriculture and organic farmers. They are mainly involved in variety testing (e.g. rice, tomato) under organic agriculture.

Website: [www.agrobio.bt](http://www.agrobio.bt)

- **Barbara Maria Rudolf (Saat:gut, Germany)**

#### **Associate member**

Barbara Maria Rudolf is a founder of the association Saat:gut for the development and implementation of organic plant breeding. Since 2010 farmers, seed traders, plant breeders and private individuals have worked together on their common interest in fostering organic plant breeding and ensuring access to open source varieties. The association enables this by breeding valuable varieties in a natural way, engaging the participation of farmers and gardeners. A key goal of the association is to inform the public about the difficulties and opportunities concerning the breeding of new varieties. To support this, the main activities of Saat:gut include breeding new organic varieties, providing advanced vocational training and public relations. They have started organic plant breeding projects for vegetables (broccoli, cauliflower, carrots) and apples.

Website: <http://www.saat-gut.org>



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## RECENT EVENTS

### **Biofach: 11th February 2015. Nuremberg, Germany.**

Louis Bolk Institute and FiBL organised a workshop entitled 'Strategies for market acceptance of new resistant varieties – from obstacles to chances' on 12th February 2015. The aim of this was to focus on crops where a lack of robust varieties for organic production causes problems if one wants to refrain from copper use. The EU funded project CO-FREE is investigating options for alternative approaches, such as the introduction of new, resistant cultivars. However, market introduction of new varieties is a challenge, especially of crops where consumers are familiar with existing variety names and characteristics such as with apples and potatoes. To tackle this problem requires a joint effort and commitment from the traders/retailers, breeders and growers. At the BioFach workshop, the extent to which such new varieties could be acceptable and how marketing tools could be developed for the next steps forwards were discussed.

### **Organic Research Centre Producer Conference: 26<sup>th</sup>-27<sup>th</sup> November 2014, Solihull, UK.**

This conference was a two-day event with producer-focused technical and business workshops on the first day, and a more specific focus on current research and innovation activities on the second day. Sessions covered a wide range of topics from breeding for organics and EU organic regulation to the use of legume diversity in forage production and grazing. For more information on the sessions and presentations, see <http://tinyurl.com/kdpgq2x>

## UPCOMING EVENTS

### **AACC International, Cereals and Europe Section (C&E) 5<sup>th</sup> Spring meeting: 'Celebrating cereals in the AACC International Centennial Year'. 27-29<sup>th</sup> April 2015, Budapest, Hungary.**

An international meeting covering a broad spectrum of cereal-related topics and bringing together multi-disciplinary perspectives. Included among the topics on the programme are new technologies in cultivar development, food processing, properties of ingredients and constituents, nutritional aspects, end product analytics and sustainability. Registration from 16<sup>th</sup> March 2015: <http://www.cespringmeeting2015.org/>

### **Eucarpia workshop: Breeding and plant microbial interactions. 25th-26th June 2015, Weihenstephan, Germany.**

This event, organised by the section on organic and low-input agriculture, will be attached to the ECO-PB meeting. The workshop aims at creating a network among plant breeders and researchers of different disciplines to explore the potential of utilizing plant microbe interactions in plant breeding. For information contact Monika Messmer ([monika.messmer@fibl.org](mailto:monika.messmer@fibl.org)).

### **Next ECOPB meeting: 26th June 2015, Weihenstephan, Germany.**

An update and discussion of the future research agenda.

## IFOAM

### **'IFOAM Organics International' Call for experts**

IFOAM Organics International is calling for experts to volunteer on three Working Groups that will help address the motions approved at the IFOAM General Assembly 2014. These motions, concerning cell fusion and new breeding techniques, were submitted by ECOPB and presented by Gebhard Rossmann at the GA (see Appendix for text of motions). The three working groups now required will focus on: 1) new plant breeding techniques; 2) cell fusion varieties and 3) closing cycles in organic agricultural systems. The group meetings will be organised primarily through remote means (Skype or phone), during the period 2015 to 2017. For more details on each of the working groups see <http://tinyurl.com/n6cjmhj>.

To apply for one or several of the working groups, please send your CV and letter of interest to [ogs@ifoam.bio](mailto:ogs@ifoam.bio) before **March 29, 2015**.

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## NEWS

**In summer 2014 three Wageningen PhD students successfully graduated on topics related to organic plant breeding under the supervision of Prof Edith Lammerts van Bueren, Special Chair in Organic Plant Breeding at Wageningen University.**

- *Erica Renaud (Vitalis-USA)*: 'Breeding and regulatory opportunities and constraints for developing broccoli cultivars adapted to organic agriculture'. See <http://edepot.wur.nl/306980>
- *Aart Osman (LBI-Chili)*: 'Towards an improved variety assortment for the Dutch organic sector - case studies on onion and wheat'. See <http://edepot.wur.nl/312216>
- *Pauline Kerbirou (Driscoll's-UK)*: 'Physiology and genetics of root growth, resource capture and resource use efficiency in lettuce (*Lactuca sativa* L.)'. See <http://edepot.wur.nl/313677>

For more information contact Edith T. Lammerts van Bueren ([edith.lammertsvanbueren@wur.nl](mailto:edith.lammertsvanbueren@wur.nl))

### Online cover crop and living mulch Wiki

As part of the FP7 funded OSCAR project (Optimising Subsidiary Crop Applications in Rotations), a wiki is being developed as an interactive user-fed knowledge source of regionally relevant information (text, images and videos) concerning leguminous and non-leguminous subsidiary crop species, species mixtures, machinery and farm case studies. Information included in this wiki comes from personal experience reports, from the scientific literature, and the experiments conducted in the OSCAR Project. It is a living document that will evolve through input from participants. The success of the wiki will depend upon contributions from registered users modifying and adding new entries. All users with an interest in the site are encouraged to sign up and start contributing. See

[www.covercrops.eu/](http://www.covercrops.eu/)

### From Seedmap.org to Wikiseedia

Seedmap.org is a user-friendly interactive online portal on seeds, biodiversity and food, and a tool for exploring the complexity of our global food systems. Launched in 2013 by USC (Canada) and ETC Group, Seedmap.org captures the narrative of the world's agricultural biodiversity, its richness, how it's threatened and who is in the frontline to nurture and defend it. The portal currently allows users to 'visit' about 400 places around the world, on a Google map, organized according to the following themes: Diversity, Threats, and Solutions.

The project continues to evolve. Through recent partnerships with Oxfam Novib and Hivos' Knowledge Programme on Agricultural Biodiversity (agrobiodiversity @knowledged) along with secured funding from IDRC (International Development Research Centre) to enhance the stories, features and interactivity of Seedmap.org, the objective is now to transform it into a 'Wiki' style knowledge-sharing portal for the biodiversity community: *Wikiseedia*.

Wikiseedia is a global initiative that highlights the role of small farmers and food producers in conserving and enhancing plant and animal genetic resources for food and agriculture. Anyone is free to submit a story online (see [www.seedmap.org](http://www.seedmap.org)) which will be edited by the global team of editors. The global editors will be supported by a team of 6 regional editors who have committed themselves to support the weekly collection of stories. Edith Lammerts van Bueren has recently been appointed as the European editor.

For more information contact Edith Lammerts van Bueren ([e.lammerts@louisbolk.nl](mailto:e.lammerts@louisbolk.nl))

### Diversifood H2020 project funded.



'Embedding crop diversity and networking for local high quality food systems' (DIVERSIFOOD) has been funded for 4 years under the H2020 SFS7A call and officially started 1st March 2015. It is coordinated by Dr Véronique Chable (INRA) and includes 21 partner organisations. The project will build on the principle that diversity enhances the resilience and productivity of

biological systems by engaging with experienced multi-actor networks across diverse farming systems, areas and crops in Europe to explore how currently underutilised diverse cultivated plants could be more widely grown within a variety of agroecosystems to increase the range and quality of crops and their products. It will help to facilitate cooperation between participatory research networks and professional breeders as well as policy makers in connecting formal and informal seed systems in Europe in relation to international negotiations on Farmers' rights



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with the International Treaty on Plant Genetic Resources for Food and Agriculture. Key-lessons based on the diverse experiences in the project will be shared to support on-farm seed production networks to guarantee high quality seed.

The project will bring together farmers, scientists, processors, traders and consumers to promote the greater use of diverse plants and produce with a local and cultural identity. This will help to demonstrate how society at large can encourage sustainable agriculture, as well as simultaneously promoting this concept through production and marketing avenues. For more information contact Véronique Chable ([veronique.chable@rennes.inra.fr](mailto:veronique.chable@rennes.inra.fr))

### **TP Organics priority topics for Horizon2020 work Programme 2016/17**

TP Organics has published a new version of its priority topics for the Horizon 2020 work programme in 2016/17. For more information see: <http://tinyurl.com/pfukyn4>

### **VACANCIES**

**New biodynamic seed project starting up in Portugal seeks key person or persons with relevant biodynamic agricultural experience and open to permaculture design principles.**

Our aim is to create a community agricultural project to commercially produce open-pollinated, biodynamic seed for distribution in the countries of Southern Europe. We plan to do this along the lines of successful enterprises in Germany and Switzerland, with whose close support we will be working. Our hope is that alongside the production of seeds, the project will engage in plant breeding, as well as serving as a centre for education and training relevant to biodynamic agriculture and to the preservation of open-pollinated seeds. To move ahead with this project we are seeking a person, or persons, with relevant experience in biodynamic agriculture and/or seed production and open-pollinated plant breeding who would like to be based in Portugal within a community living situation.

At this stage the project is in preparation. We are looking for a suitable location and gathering support and funding from interested parties in Portugal and Europe. Our aim is to be in-situ in Portugal, ready to begin work on the land sometime in 2015.

If interested, and for more details, please contact Stefan Doeblin ([Stefan.doeblin@network-economy.com](mailto:Stefan.doeblin@network-economy.com)) Tel: +32 473 718 511

### **ECOPB BOARD**

ECO-PB held its General Assembly in Istanbul Oct 13<sup>th</sup> 2014, chaired by the President, Monika Messmer. A new board was elected and the members are: Monika Messmer (FiBL-CH), Gebhard Rossmann (Bingenheimer Saatgut), Maaïke Raaijmakers (Stichting Zaadgoed-NL), Frederic Rey (ITAB-FR), Edwin Nuijten (Louis-Bolk, NL) and Sally Howlett (ORC-UK).



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## Appendix

### **Text of 2014 GA motions on New Plant Breeding Techniques, Dealing with Cell Fusion Varieties, and Closing Cycles in Organic Systems**

#### **Motion 61 (Cell Fusion varieties):**

The motion reads as follows:

##### *“Replacement of Cell Fusion Varieties*

*Dependent on the financial means being available the IFOAM G.A. urges the IFOAM World Board to:*

- *Develop a strategy for the replacement of varieties derived from cell fusion, including protoplast and/ or cytoplasm fusion from organic farming practices.*
- *Define guidelines for the socio-economic implementation of such strategies.*
- *Promote alternative breeding programs like organic plant breeding to foster the development of cell fusion free varieties. In order to achieve these goals by the next G.A. in 2017, a working group should be established.”*

#### **Motion 62 (New plant breeding techniques):**

The motion reads as follows:

##### *“Guidelines for New Breeding Techniques*

*Dependent on the financial means being available the IFOAM General Assembly urges the IFOAM World Board to define guidelines for the use of varieties derived from new breeding techniques. This implies evaluating the compliance of new plant breeding techniques using the principles of Organic Agriculture, promoting a legally bound disclosure of breeding techniques that do not comply with the principles of Organic Agriculture, and developing a strategy to prevent varieties derived from such breeding techniques from entering the organic sector. In order to achieve these goals by the next G.A. in 2017, a working group should be established.”*

#### **Motion 53 (Closing Cycles):**

The motion reads as follows:

*“IFOAM initiates a debate on closing cycles in organic agricultural production systems, taking into account potentially high-risk substances and publishes a position paper on this topic critical to organic farming.”*