

Reminder: Conference in celebration of ECO-PB's 10-years anniversary

The European Consortium for Organic Plant Breeding (ECO-PB) founded in 2001 is now in its 10th year – worth to celebrate this with a conference to reflect on the achievements and challenges of Organic Plant Breeding. The title of the conference is "Organic Plant Breeding: What makes the difference?".

A diversity of organic breeding programs has emerged and several cultivars specifically bred for organic and low-input agriculture in Europe are on the market. Cultivars adapted to organic farming systems contribute to the realisation of a low-input external management with emphasis on long-term soil fertility, active soil micro-organisms and optimal farm system resilience. To achieve such cultivars many new concepts have been applied in research and practical breeding, such as broad disease resistance, exploiting genetic diversity in the cultivar concept, improved weed suppression, root systems interaction with beneficial soil micro-organisms, and more experimental approaches. But what makes the difference in organic plant breeding? Is it merely a matter of adding neglected traits to a breeding program? What can be achieved by selecting under organic growing conditions? And to what extent can organic values be linked to future perspectives by considering plants as partners in evolution?

Oral and poster presentations have been selected and the conference program is finalized. The oral presentations will be given in five different sections: New approaches in organic breeding, Socioeconomic aspects to realize organic Breeding, Examples of organic breeding programs, New questions, Country update of organic breeding programs and research. Posters from a wide range of topics will be presented in a special poster session. For each presentation, a one page abstract was handed in. These abstracts will be published in the form of an abstract book, which will be available for all participants in a printed version and will also be downloadable as pdf on the ECO-PB website after the conference.

The conference venue is the "Ökohaus" in Frankfurt (Kasseler Strasse 1a, 60486 Frankfurt am Main, Germany), in walking distance of the railway station "West Bahnhof".

The conference will run from Thursday 3rd November, 1 pm till Friday 4th November, 1 pm.

Online registration is possible until October 3rd.

More information: Klaus Peter Wilbois ([Klaus.Wilbois\(at\)fibl.org](mailto:Klaus.Wilbois(at)fibl.org)) and www.ecopb.org

European Workshop on Organic Seed Regulation

ECO-PB is going to hold another international workshop on the use of organic seed in organic farming. The workshop shall take place on 21st and 22nd September 2011 at the Organic Research Centre, Elm Farm, Hamstead Marshall near Newbury, RG20 0HR, UK

The aim of the meeting is to commonly evaluate the progress made over the last few years in seed derogation policies and practices in Europe. A special attention is paid on the achievements since the last meeting in 2008 (see link to the report below). The central question is how can we (further) harmonize regulations on a European level and create a level playing field among (groups of) EU countries. The meeting finally aims at negotiating and attuning the specific minimum of required variety assortment with the possibilities of the committed seed producers.

In the workshop we would like to welcome organic seed suppliers, representatives from the national ministries and competent authorities as well as from the EU Commission, advisors/scientists working in the area of organic seed production and control bodies managing the derogation system.

For more Information see <http://www.eco-pb.org>

Initiative of Bio Suisse to promote organic breeding

Bio Suisse decided end of 2010 to actively support organic breeding of plants and animals in Switzerland. In order to find the optimal approach and organization form for the promotion of organic plant breeding farmers, breeders, seed suppliers, advisors, NGOs, local politicians and researchers were invited to identify most urgent needs and to elaborate a common strategy. Three working groups were defined to discuss (i) the ethical and philosophic aspects, (ii) the different breeding techniques and (iii) the organizational and political issues related to organic plant breeding. In this on-going process a draft of Rheinauer Thesen II was developed that defines breeding as a dialog at three levels (will be presented at ECO-PB Conference in November), as well as a draft guideline for organic plant breeding for Bio Suisse. An own label for organically bred products "bioverita" was proposed as well as a coordinated political lobbying. Bio Suisse will follow up this discussion and further elaborate a roadmap involving the different stakeholders till the end of the year.

Study on the evaluation of breeding techniques for organic farming funded by Mercator Stiftung Schweiz

FiBL is conducting a study on the evaluation of different techniques and methods used for plant breeding. Based on a first surveys among plant breeders and researchers a catalog of the presently applied techniques as well as new breeding methods in the pipeline were compiled.

A second survey was conducted to investigate the acceptance of the various techniques among the organic stakeholders and to elucidate the relevant criteria for such approval or disapproval. These surveys were focused on the German speaking countries, but members of ECO-PB and the international community were also included. To discuss this matter in more detail and to reach consensus on the criteria that should be applied for the evaluation an expert workshop with 30 participants took place. Varieties useful for organic farming were classified into (I) varieties derived from conventional breeding programs without genetic engineering that fit under organic conditions, (II) varieties derived from breeding programs for organic farming respecting the specific breeding goals for organic farming (product based), and (III) varieties derived from organic breeding programs conducted under organic farming conditions and according to organic values (process oriented). One outcome of the workshop was that ethic values were most important for the evaluation of breeding techniques. The integrity of the plant as a living unit interacting with its environment should be respected.

In general, it was agreed that the cell comprehending nuclear and extra-nuclear DNA, RNA, cell organelles and cytoplasm should be treated as smallest impartible unit. Applying this criterion, technological intervention on DNA or RNA level like trans- and cis genetics, zinc finger nuclease technology or oligonucleotide directed mutagenesis should not be accepted for any variety grown under organic farming. Same holds true for cytoplasm fusion, destroying one nucleolus and forcing cell organelles to combine with the nucleolus of another species to develop for example

male sterile broccoli. However, there was a controversial discussion if exceptions could be possible for varieties of classification I that were derived from protoplast fusion, e.g. combining different *Phytophthora* resistance genes of four potato cells. The catalog of the breeding techniques as well as a recommendation for the evaluation criteria of such techniques will be translated in English and made available via internet to enhance further discussions in the different countries.

Update: IFOAM plant breeding standards

After integration of a chapter on organic plant breeding in a draft version of the IFOAM Standard for Organic Production and Processing in March 2011 IFOAM has published it for consultation by the IFOAM members in the preceding month. There were many comments regarding drafted standards which are now being processed in the IFOAM head office. After that a new draft of the IFOAM Standard for Organic Production and Processing will be prepared and then, after the IFOAM General Assembly, published for approval. The IFOAM Standard for Organic Production and Processing will not be discussed during the IFOAM General Assembly.

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