ECO-PB is critical on the implementation of COUNCIL DIRECTIVE 2008/90/EC "on the marketing of fruit plant propagating material and fruit plants intended for fruit production": One step forward two steps back as it threatens biodiversity and might kill any initiative of small and hobby fruit breeding.

In the last ECO-PB newsletter we reported on the European action plan for a Review of the Community legislation on marketing of seed and plant propagating material and related issues and that this seems to be a step in the right direction if it comes to biodiversity and plant breeding for niche markets. Now, having a look at COUNCIL DIRECTIVE 2008/90/EC of 29 September 2008 "on the marketing of fruit plant propagating material and fruit plants intended for fruit production" which is to be implemented in the upcoming time it seems that EU bureaucracy works according the principle: one step forward, two steps back.

In the action plan referred to in ECO-PB newsletter I/2010 the intention of the commission was recognizable to moderate the tremendous adverse implications of the community legislation on seed and propagating material (S&PM) on biodiversity and seed and propagating material for niche markets including organic production. With DIRECTIVE 2008/90/EC a new bureaucracy monster is unleashed targeting the last resorts of bio diversity conserved in-situ. In the directive it is mandated, amongst other things, that in the future only those fruit varieties may be traded and propagated in tree nurseries that had been subject to a bureaucratic and costly registration procedure. This requirement implies, to those who do not exert themselves to achieve the preservation and propagation of historical fruit varieties for entirely commercial reasons, a substantial impediment to their conservation work and therefore a danger to the biodiversity in fruit growing. Costs of some thousand Euros for a variety registration will be the definite off for hundreds and thousands of committed non-commercial or small and hobby breeders who strongly contribute to preserve our biodiversity in situ. The loss of genetic diversity within our commercially grown fruit trees is enormous: In Germany for instance about 98 percent of apple varieties used in commercial production and bred during the past 80 years are descended from only six ancestors i.e. Golden Delicious, Cox Orange, McIntosh, Jonathan, Red Delicious und James Grieve. The by far dominating parent is Golden Delicious contributing its genes to 58 percent of all grown apples.

Although the directive itself actually contains some options to account for the conservation of bio diversity but those are weakly formulated and the chance that the implementation of this directive - be it EU wide or member states specific - unfurls its most negative effects on existing bio diversity, breeding initiatives and other committed small breeders is rather high since lobbyists advocating for the big fruit breeding industry are well in position.

Regarding this, it seems that there is hardly any learning process in the EU policy making: While on the one hand the EU with its action plan is prepared to relief adverse effects of the EU S&PM legislation on bio diversity Brussels is releasing a directive which foreseeable consequence will be an accelerated loss of bio diversity with regard to fruit crops. But still there is a chance for EU Member States to make the best out of the bad. And there is a growing opposition to implication of this directive. For instance the German Pomological Association (see link to their position paper), Nature Conservation Organizations and many others recently objected strongly to the implementation of the directive.

The DIRECTIVE 2008/90/EC can be looked up here:
Finalisation of the European project “Farm Seed Opportunities”: Opportunities for farm seed conservation, breeding and production

The EU project “Farm Seed Opportunities” (FSO) has been finalized on March 31st 2010. It was a specific targeted research project in the FP6 European program and started in 2007 when EU policy makers were facing the problem of defining the rules for the implementation of the directive 98/95/CE on conservation varieties. During FSO three years of activities, two new directives have been published defining the implementing rules on conservation varieties for agricultural crops (2008/62/CE) and vegetables (2009/145/CE). The implications of each of the articles of Directive 2008/62/EC for the current practices of end-users and the stimulation of biodiversity were particularly analyzed during the FSO program.

FSO identified several situations that are not already taken into account by seed laws, mainly (i) for varieties still cultivated in the so called alternative farming systems or for niche markets and (ii) for new populations recently created in the framework of Participatory Plant Breeding or by innovative breeding methods favoring plant diversity inside the variety. These varieties have a great potential use for organic agriculture for their adaptability to specific environment. They are still cultivated in the so called alternative farming systems or for niche markets. They also show interest in coping climate change in the near future.

Even though the project aims mainly at responding to the needs of European policy makers, FSO has performed several studies and analysis to precise the concepts behind the “conservation varieties” regulations, verify the situation in European’s fields and suggest further development of these regulations aiming at preserving plant genetic resources. A FSO original and extensive experiment was based on four crop and vegetable species (wheat, maize, spinach and beans) over three years (2007 to 2009) by growing successive generations of various varieties of in a European network (Italy, France, the Netherlands) on organic farms. In 2009, an additional common trial was conducted in one site (Le Rheu experimental station in France) under organic farming system. The field trials allowed obtaining an accurate characterization of varieties evolution over time in response to drastic environmental changes and contrasted farmer’s practices on-farm. Overall, after only 2-3 years of on-farm growing, evolution over time appeared significant for many traits assessed both on-farm and in station.

All the deliverables and conclusions can be found on our website: www.farmseed.net:

1. The diversity of breeding initiatives of landraces and local varieties: inventory and case studies
2. Report on the definitions of varieties in Europe, of local adaptation, and of varieties threatened by genetic erosion
3. Report on stakeholder expectations of placing biodiversity of agricultural crops on the market
5. The analysis of the bottlenecks and challenges identified for the on farm maintenance and breeding in European agricultural conditions
6. Methodologies for participatory research in on farm maintenance and breeding
7. The experimental data on seed qualities of farm varieties
8. Seed quality and marketing recommendations
9. Analysis of relevant cases studies on the Role of Innovative Market Promoting Sustainable Use of Agro biodiversity
10. Policy recommendations

A booklet which highlights the main FSO conclusions will be available within 2 months in five languages in pdf format.

Participants belonged to six different countries. The 12 partners were researchers involved in organic agriculture (FiBL and LBI), genetic resources (CGN, IGSA and INRA), seed quality (PRI) and participatory plant breeding organisation (IIED and WUR), organic farmer organizations (AIAB) and seed networks (RAS and RSP).

Collection of Open Pollinated Vegetable Varieties as Basis for Biodynamic and Organic Breeding Activities

Kultursaat is committed to preserving and developing open pollinated varieties for quality-oriented commercial organic cropping. This task is complicated due to the dominance of hybrids in the range of offered seeds – and thus a decreasing number of open pollinated varieties is at hand as basis for biodynamic vegetable breeding programmes. Although, in many cases, there are still samples from gene banks (e.g. Gatersleben/Germany), the plants which grow from these seeds are often useless in terms of commercial horticulture. Also, the characteristics of these varieties can hardly be recognized, which certainly has to do with the limited capacities of state-run gene banks. Moreover, gene banks can no longer guarantee that the seeds they store are not genetically modified! Hence, a collection of open pollinated varieties still available on the north and middle European seed market has been built up.

This collection was co-financed by a project in the Federal Agency for Agriculture and Food (BLE) (http://www.bundesprogramm-oekolandbau.de/index.php?id=181&fkz=06OE154&pos=211), the Hessian Ministry for Environment, Energy, Agriculture and Consumer Protection (http://www.hessen-nachhaltig.de/web/artenvielfalt-in-hessen/obst-und-gemusesorten), and a foundation of the private sector. The first varieties of cauliflower, corn salad, kohlrabi, carrot, leek, celery, spinach and onions have now been screened under biodynamic farming conditions. The findings are publicly accessible via an online database (http://www.kultursaat.org/index.php). Preserving seed cultivation has already been carried out in the case of some of these varieties. “The screenings of the last four years showed us that open pollinated varieties are absolutely worth for organic growing; in our opinion, e.g. 10 out of the 49 tested leek varieties are directly suitable for organic cropping,” Christine Nagel, cultivator for Kultursaat, is happy to say. “However, if, as often in the past, these varieties will be replaced by hybrids in the near future, quality-oriented organic farming and the natural food scene will lose valuable potential”, Michael Fleck, managing director of Kultursaat, adds. “To ensure the availability of these varieties for commercial growing, Kultursaat is striving to create a biodynamic maintenance breeding in each case and to register at cost with the Federal Office for Plant Varieties as ‘another breeder’. This is necessary to ensure that the seeds of these varieties continue to remain legally available – in this case even from organic seed production.” At the moment, the charitable association is urgently looking for financial support to be able to continue the whole project and especially to expand the collection to include fennel, chicory (radicchio, sugarloaf), and courgettes.

For further information contact Kultursaat e.V. (www.kultursaat.org)
2\textsuperscript{nd} EUCARPIA Organic and Low-input Section Conference “Breeding for resilience: A strategy for organic and low-input farming systems?”

Paris, 1-3 December 2010: The Eucarpia Organic and Low-Input Agriculture Section will hold a conference in Paris, France on December 1-3 2010 on breeding for organic and low-input farming systems with a special emphasis on strategies that allow for more resilience in response to global change. While organic and low-input agricultural systems are more exposed to heterogeneous environments, low nutrient availability and biotic as well as abiotic pressures than conventional ones, global change might increase fluctuation in environmental conditions by producing drastic variation in climate, epidemic pressures, nutrient availability etc. These changes could be considered an opportunity for the organic sector to develop original and innovative strategies for high level resilience. This conference wishes to take inspiration from the ecological sciences to reconsider the use of biodiversity without ignoring the new tools coming from genomics.

This conference will be jointly organized by INRA (UMR Le Moulon, SAD-Paysage Rennes, Montpellier) and ITAB at Le Comptoir Général, a special location in Paris which is based on ecological and social responsibility and supports a different viewpoint on today’s world. There will be a call for papers for oral and poster presentations. More information is available on the Eucarpia and ECO-PB website.

For more information see www.eco-pb.org and http://www.eucarpia.org/ or contact Isabelle Goldringer, e-mail: isa(at)moulon.inra.fr or Frédéric Rey, e-mail: Frederic.Rey(at)itab.asso.fr;

ECO-PB General Assembly attached to the 2\textsuperscript{nd} EUCARPIA Organic and Low-input Conference in Paris

The next General Assembly of ECO-PB will be attached to the 2\textsuperscript{nd} EUCARPIA Organic and Low-input Conference in Paris to be held from 1 to 3 December 2010. It is planned to start the Annual GA at 10.00 on December 1\textsuperscript{st}. Further information to ECO-PB members is going to be send out in due time.

For more information on the ECCARPIA conference see www.eco-pb.org and http://www.eucarpia.org/