

### **First World Conference on Organic Seed**

The International Federation of Organic Agriculture Movements (IFOAM) as the worldwide umbrella organisation for the organic movement together with The International Seed Federation (ISF) and The Food and Agriculture Organisation of the United Nations (FAO) are going to hold the first world conference on organic seed in Rome from 5 to 7 July 2004. The main goals of this conference are to

- create a platform for international information and knowledge exchange between the organic movement and the "conventional" seed sector,
- focus on scientific/technical aspects related to organic seed issues,
- evaluate regulatory requirements and related issues for organic seed and
- provide a platform for networking and cooperation.

For further information see <http://www.organicseedconf.org/> . For a pdf-file of the programme click here [http://www.eco-pb.org/07/organic\\_seed\\_conf.pdf](http://www.eco-pb.org/07/organic_seed_conf.pdf)

### **Results of testing barley for COVERED smut in Germany**

In last newsletter we could report about barley loose smut testing. Also the German marketed spring and parts of the winter barley collection were tested for susceptibility to covered smut with support of the German Ministry for Consumer Protection, Food and Agriculture and the Ministry for Agriculture of Lower Saxony. This was done at Cereal Breeding Research Darzau and in co-operation with IBDF at Dottenfelder Hof. Results now are available under [http://www.darzau.de/en/projects/barley\\_covered\\_smut.htm](http://www.darzau.de/en/projects/barley_covered_smut.htm)

Relatively many varieties remained without infection after artificial infection with a local covered smut. But there are also varieties which can be seen as catchers for covered smut. Covered smut can spread not only via seed, but also via seed bags and machinery, in particular during threshing or by combine. The results indicate a simple implementation of selection for covered smut resistance into modern breeding to increase the number of varieties for easy multiplication under organic farming. During the next three years the marketed German spring barley collection will be tested for barley leaf stripe disease now, which is another seed transmitted disease of barley and also of interest for organic multiplication and on farm conservation.

By Dr. Karl-Josef Mueller

### **Swiss organic fruit industry content with consensus on new regulation on planting material of perennial crops**

Since January 2004, the Swiss organic label organisation BioSuisse has implemented new regulations for seed and plant material. Concerning perennial crops, detailed crop-specific instructions have been worked out by the BioSuisse commission of experts, thus ensuring that all stakeholders and in particular producers can agree with it.

The BioSuisse commission of experts for fruit consists of

- 9 elected heads of 8 regional organic fruit grower groups,
- 2 organic fruit retailers,
- 1 BioSuisse fruit and vegetable manager and
- 1 fruit expert of the Research Institute of Organic Agriculture (FiBL) at Frick.

The main goal of this more detailed regulation is to limit the number of derogations from the general guidelines, which say that all planting material should be of organic origin.

Derogations for using conventional planting material are more or less restricted to hazards that force the farmer to re-plant damaged trees, or that lead to a situation where the tree nursery can not fulfil the production contract. Derogations relating to specific short-term (shortly before planting time) non-availability of the desired variety, clone or rootstock are very restricted.

One crucial point of the regulation is that the farmer is obliged to order trees **in time**, (this means to make a production contract with the nursery, usually 1 to 1.5 years before planting) so that organic tree nurseries can propagate the desired trees. This means that no derogations will be given to farmers who order trees too late. There are crop-specific deadlines for ordering trees.

An additional advantage of ordering on a contract basis with the nursery is the possibility to agree in advance on the desired tree quality.

Currently the "Reality Test Phase" of the concept has started and is progressing satisfactorily, so far. Neighbouring countries show a high interest in this Swiss model. There, it might serve as an example with its good and (hopefully few!) bad experiences.

Link to the German text of the regulation: <http://www.fibl.org/forschung/anbautechnik-einjaehrig/saatgut/documents/biosuisse-merkblatt-jungpflanzen.pdf>

By [Franco Weibel](#) and [Christine Arncken](#), FiBL

### **Participatory characterisation, evaluation and selection of onion accessions for new base populations**

(E.T. Lammerts van Bueren, L.J.M. van Soest, E.C. de Groot, I.W. Boukema & A.M. Osman)

In a recent co-operation between the Centre for Genetic Resources, The Netherlands (CGN), Louis Bolk Institute (specialised in organic farming) and organic farmers, 37 onion accessions were characterised and evaluated under organic growing conditions. The accessions were divided in 5 different groups according to their market use. Farmers have assessed these accessions using criteria important for organic farming systems such as leafiness, field tolerance for pest and diseases, yield capacity and storage ability. To establish several base populations the farmers, in collaboration with the researchers selected the best plants within the five groups of onion accessions. The selection process was documented by the researchers and performed during three phases of the crop: a) during full leaf phase for field characteristics, b) after storage for characteristics on yield and storage ability, and c) before flowering for generative traits.

The collaboration between farmers and researchers had the following results:

- For the first time in the Netherlands gene bank material has been characterised under organic farming conditions. This makes these accessions more accessible for the utilisation in organic breeding programmes.
- Farmer participation resulted in including additional plant traits for gene bank characterisation as well as new selection criteria for breeding programmes
- The joint characterisation and evaluation also gave researchers insight on how farmers evaluate and value certain plant traits
- It was noticed that these open pollinated varieties showed a substantial diversity, which can be further exploited for organic farming systems. Variation for important properties was found within and between the 5 groups.

- The group defined also 6 high performing accessions which may also be exploited on its own in order to achieve better material for organic farming systems.

Seeds of six new base onion populations are now available for organic breeding programmes, and will be used in further selection.

The report on this project has been published in Dutch.

More information: E. Lammerts van Bueren, Louis Bolk Institute, The Netherlands

### How can we ban Protoplast fusion?

Protoplast fusion is a breeding technique under the EC definition of genetic modification. Therefore, it must not be used in organic plant breeding and seed originated from it are not allowed in organic farming. Many organic farmers agree on that, it is mentioned in the IFOAM basic standards and protoplast fusion is not indispensable for plant breeding; so why isn't forbidden yet?

The problem is: legally (according to EC Directive 2001/18) there is a difference between protoplast fusion and other genetic modification techniques like micro-injection. You don't need a license for cell fusion, including protoplast fusion, as long as it is a fusion between cells from the same species or close relatives. As a consequence of that, in practice, seeds produced with the use of any kind of protoplast fusion are not labelled as 'GM'. Therefore, they are not recognizable for farmers and therefore, governments say, we cannot forbid protoplast fusion. Until now, organic plant breeders don't use protoplast fusion and also the organic seed producers know how to recognise and avoid varieties made with this technique. Often those seeds are patented and labelled as CMS or 'super' hybrids. But organic farmers who buy conventional seed can use CMS seeds without knowing they are in fact made by genetic modification.

Since the ban of GM is a major topic for the organic sector; we should make an effort to realise a legal ban on protoplast fusion. Otherwise we might lose our credibility.

Maaïke Raaijmakers, Co-ordinator on gene technology and propagating material, Biologica, The Netherlands

### Plant Breeding For Agricultural Diversity

is the title of the new article on the ECO-PB Web site by Scott L. PHILLIPS, and Martin S. WOLFE of Elm Farm Research Centre, UK. To read this article click here [http://www.eco-pb.org/09/breeding\\_for\\_diversity.pdf](http://www.eco-pb.org/09/breeding_for_diversity.pdf)