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## **ORGANIC SEED PRODUCTION AND SEED REGULATION**

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Organic agriculture is based on principles of self-sufficiency, recycling and independency of chemically based agricultural systems. Organic fields should be fertilized with manure from organic animals, organic animals should be feeded with organically produced fodder, and organic plants should be produced from organically produced seeds. This is formulated into most standards for organic production all over the world. However, in real life, most organic plants are produced from conventional seeds in most countries, since organic seeds are rarely available to the organic farmers. In the standards defined in "Council Regulation (EEC) No 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs", amended in "Council Regulation (EC) No 1804/1999 of 19 July 1999" a derogation is included in which organic farmers until 31 December 2003 may use conventional seeds in cases, where organic seeds are not available. Organic seeds of an appropriate variety will hardly be available in all crops in Latvia and many other countries by 2004, and the question therefore arises what will happen after 2003 in cases, where organic seeds are still not available for the organic farmer.

The EU regulation states that the EU commission during 2002 shall make an evaluation of the current situation and propose a reformulation of the regulation on this point. This evaluation is on going, and things may change during this year. However, it is my impression that the conclusion will lead to a system, where there will still be some room for the use of conventional seeds, but under more strictly defined conditions than is the case today.

The situation for organic seed is very different in different countries in Europe today. In some countries, no organic seeds are used or available at all. In other countries some organic seeds are available, but are not used. In yet other countries, most crops are produced from organic seeds. A comparative study in the Nordic countries demonstrates that these differences partly can be explained by differences in certification procedures. In Norway, some organic seeds have been produced, but were not purchased by the organic farmers, who preferred the conventional seeds, which were cheaper. The Norwegian certifier and competent authority have granted a general exemption from the use of organic seeds because the organic seeds produced were insufficient to supply the market. This lead to a situation, where the development of the organic seed production were blocked by the procedures of the certifier. In Finland and Denmark, the certifier have not granted a general exemption to use conventional seeds, but have only granted exemption in individual cases. The organic farmers in these countries must demonstrate to the certifying body that organic seeds were not available, before conventional seed can be used. All organic seeds produced must therefore be used before conventional seeds can be

used of the same crop, and this is an ideal situation for organic seed producers from a marketing point of view. This has led to a rapid development of the organic seed production in these countries, and today the majority of the seeds in the larger crops like cereals, legumes and lay are organically produced, either domestically produced or imported. Also in Sweden the organic seed market has significantly developed since the competent authority banned the use of conventional seeds in cases where organic seeds were still available on the market.

In Sweden and Finland the competent authority every season publish a list of organic seeds available. There is a deadline to be included in the list before sowing, and the competent authority will inform the farmers when an available seed lot is sold out, and conventional seeds therefore can be used. In Denmark the list is on the Internet, and will be updated daily or weekly whenever new seed lots become available or are no longer available. This is very workable for the editor of the list, but very flexible for the seed companies, since they can add new seed lots to the list during the sowing season, e.g. when imported seeds become available to fill up a hole when domestic seeds are sold out.

It is most likely that the revision of the EU regulation will lead to a situation, where every country or region must have some kind of list including all available organic seed lots, and that conventional seeds may only be used in a country when it is demonstrated that organic seeds are not available in this country. A national exemption to use conventional seeds must therefore be approved by the other EU countries. To export organic products into EU from third countries, including accession countries, it is likely that criteria should be met that demonstrates that the request to use organic seeds meets equivalent standards. This calls for a definition of 'availability'. When are organic seeds available? Do organic farmers have to use organic seeds, if only low quality seeds are available? Or, if the price of organic seeds is extremely high? These questions are subject to discussions and negotiations during the revision of the EU-regulation this year.

Most likely, the regulation will end up with a formulation saying that organic seeds should be used only if certified seeds from certified organic farms are available. According to the EU regulation on seeds, seeds may only be purchased if they are certified. Not certified seeds are therefore not available, and the seed certification program include some standards for seed quality concerning purity of the variety, germination ability, weed contamination etc.

Most conventional seeds are treated with fungicides, which is not an option in organic agriculture. Hence, the focus in the certification of seeds have not been on seed health, and seed may very well be certified even being heavily infected by seed borne diseases. There is therefore a need to define quality standards for seed health, and include these in certification of organic and other seeds not treated with fungicides.

When seed borne diseases infect organic seed lots in Denmark, the seed lot will be discarded. This practice leads to huge losses of organic seeds. Some years, almost all organic seed lots are discarded, which makes planning of organic seed production almost impossible. In 2000, 90% of the pea seed lots were discarded because of *Ascochyta* spp., and the same were seen a few years earlier with winter wheat infected by *Tilletia caries*.

There is therefore a need to develop cropping procedures to minimize the infection in of seed borne diseases the field and of seed treatments appropriate for organic production. Also the threshold levels must be adjusted to the organic cropping conditions and assessment methods reliable to limit the quantity of organic seed lots discarded.

The driving force in the development of the organic seed sector is the beneficial situation for the organic seed companies, when organic farmers have to use organic seeds when available. The EU praises the marked economy, and the price differences are therefore applaud as a driving force in development of the sector. It is therefore unlikely, that a high price of organic seeds will be an acceptable excuse to use conventional seeds.

The organic seed sector in Latvia and most other accession countries is under establishment and need further development. Organic seeds are not exactly needed in the short term, as conventional seeds can be used when organic seeds are not available. However, the establishment and development of a well functioning seed sector takes many years, and organic seeds will be needed in a few years. Foreign seeds are like to be offered from other countries, and the EU is likely to demand some initiatives, if organic products shall be exported to EU. It can therefore be recommended to start up organic seed production, and inspection procedures that guarantee that organic seeds are used when such seeds are available.