



## AGROBIODIVERSITY AND ORGANIC FARMING IN AUSTRIA

what Austria will miss, when GMO-Technology enters its Agriculture

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## Keywords:

- Currently we face a fast growing demand on "Agro-Biodiversity-Products"
- Lacking availability of locally adapted varieties in good quality
- High need for Participatory Plant-Breeding to raise seed-quality of local varieties
- New European GMO-Seed-Saftey-Standards, the biggest single threat for Austrian and European Agro-Biodiversity

#### INDUSTRIALIZED AGRICULTURE -THE BIGGEST POSSIBLE LOSS IN FOOD-QUALITY!

As in all industrialized countries, the rich Austrian agro-biodiversity, developed by farmers and gardeners over thousands of years, was almost brought to extinction by industrial agriculture within the last hundred years.

Industrialization of agriculture brought us so-called high-yielding varieties (Hybrids, CMS-Hybrids, GM-varieties), which seem, compared with local or peasant varieties, at a first view, so superior, at least when grown in favorable locations and within monocultural systems and when using high amounts of synthetic fertilizers and pesticides.

This development changed our agricultural traditions deeply. Agriculture became more and more a field of industrial production, with no intention for sustainability. Production just happens where one could expect high productivity and high profits. Production for local markets and for self-sufficiency rapidly decreased. The cultivation of land of "minor productivity" was given up subsequently.

Much too late consumers started to recognize, that with the erosion of small-scale-farming not only cultivated landscape, but also local markets and hundreds and thousands of traditional varieties of fruits, vegetables, etc. and breeds were lost, and with them an uncountable number of wonderful, healthy and well-tasting food.

#### ORGANIC FARMING - A NEW CHANCE FOR MODERN AGRICULTURE? YES, BUT.....!

As a reaction to this unhealthy development in the 1980ies a growing number of Austrian farmers, especially small-scale farmers, moved out to establish the organic farmers-movement. What seemed in the beginning a very ridiculous and old-fashioned method, turned out to be a successful alternative to modern industrial agriculture, supporting sustainable concepts for nourishing people with healthy food.

But at that time concepts for organic farming still were developed with a strong regard to the strategies of conventional industrial-farming systems.

Sometimes it even seemed, as if the organic farmers-movement would have liked to prove, that they could do a better work with similar concepts as the agro-industrial production-system, and that even without using synthetic fertilizers, herbicides and pesticides.

But no need to mention, that this method turned out to be not as successful as expected and it did not really gain the full trust and respect by the consumers (especially when they got a personal view on this method of "organic" production). Never the less, this type of organic mass-production is still the dominating one, although the vast majority of organic farmers are not involved in this form of organic production.

Less and less they felt represented by the activities of BIO AUSTRIA, the organizational roof of most Austrian organic farmers.

In the years 2006/07 BIO AUSTRIA, encouraged by many of its members, started a discussion on the *basic values of organic farming*.

All over the years, BIO AUSTRIA has been a very reliable partner in our fight against Agro-GMO-technologies, but now, in this still ongoing discussion-process, they discovered, that truly sustainable organic farming can become a major source for slowing down climate change, and also, that small-scale-farming can turn out as the major factor for the development of new agro-biodiversity and hence for food-sovereignty. And at these points they also met the interests of many of their members again!

BIO AUSTRIA started to become a very trustful partner for organizations like ARCHE NOAH and the SLOW FOOD movement, both working for Agro-Biodiversity in Austria.

## "ARCHE NOAH" ("NOA'S ARC"), THE SEED-SAVERS-MOVEMENT IN AUSTRIA

IN 1990 ARCHE NOAH was founded by two groups of organic small-scale farmers and gardeners, which were heavily irritated by the new developments on the national and international seed-market and seed-legislation.

For almost two decades ARCHE NOAH collected seeds of regional and traditional varieties, mainly from Austria and from Southeast-European countries. With more than 6000 accessions of vegetables, potatoes, herbs, grains, fruits and berries, we maintain one of the largest private seed-collections in Europe.

But besides just maintaining this seed-collection, ARCHE NOAH developed a well functioning stewardship-system for seed-savers. Some hundreds, of more than the 7500 members, consisting mainly of gardeners and organic farmers, are involved in seed-saving-activities and a growing number is involved in our *On-Farm-Conservation-Network*.

## HOW TO MEET THE GROWING DEMAND ON "PGR-(Plant Genetic Resources)-PRODUCTS"

In front of a globalized food-market, producing more calories than ever before, but leaving mor the one billion people starving on the one side and driving about 2 billions of people into adipositas on the other side, we currently face a situation, that an increasing number of people in Austria is demanding well-tasting and healthy food from regional producers.

For many people ARCHE NOAH became a symbol for giving access to seeds, plants and knowledge of traditional varieties, which meet those demands.

Since a few years many publications, gastro-journals, TV and Radio-programs etc. are abounded with reports on food, made of traditional varieties and breeds and praise their culinary qualities.

Even big supermarket-chains ask for cooperation to get products of traditional and local varieties and breeds on their shelves.

Over the past years ARCHE NOAH has started numerous projects to make these products available on the markets. Some of these projects are running in cooperation with the Austrian Ministry of Agriculture and BIO AUSTRIA and also with the international SLOW FOOD Foundation for Biodiversity ("Arc of Taste"), others with a bio-dynamic seed-company, but also with a big Austrian supermarket-chain.

But in spite of a growing public interest for "Biodiversity-Products", we are facing some major obstacles, which still make it difficult to place these products successfully on the domestic market.

#### WE NEED MORE SEEDS OF LOCALLY ADAPTED VARIETIES IN GOOD QUALITY!

Of course the ARCHE NOAH seed-archive or public gene-banks can offer seeds of thousands of traditional varieties, but those seeds have not been propagated in the region of their origin over a long period of time. And hence, many of those varieties, at least to some extent, have lost their specific traits over the years in exile.

So, if farmers want to produce successfully with traditional varieties, these traits have to be reestablished by specific selection in their region of origin or in related areas. And usually this works out very well, if one knows how to handle it.

But who is really enabled to do this work properly? Even organic seed-companies, with very centralized production-structures, despite of their tremendous engagement, unfortunately are not very helpful for this work. This breeding work has definitely to be carried out on the farms itself. But most of the farmers have not only lost their seeds over the past decades, they also have lost the basic knowledge about seed-growing and plant-development.

Therefore ARCHE NOAH offers seminars and trainings and specific literature on these topics since many years. Hundreds of organic gardeners and farmers have gone through these intensive trainings, but this still is not enough to develop high quality seeds of regional seed-varieties in sufficient amount and good quality.

Currently we also experience, that the costs for those breeding-activities turn out to be a major obstacle for professional gardeners and farmers! Some of the farmers were lucky, by choosing varieties, which were easily to be (re-)developed, others worked with varieties over years and the costs for this work turned out to be higher than what they were able to invest for successful plant-development-projects and consequently they stopped to continue with this work, and were left with lots of frustration.

#### HIGH NEED FOR A PUBLICLY FINANCED PARTICAPATORY PLANT-BREEDING!

This development indicates quite clearly, that we need not only new forms of breeding for regional varieties, but also new forms of funding of these activities!

The EU is calling out the *Year of Biodiversity in 2010*! Any further erosion of biodiversity should be stopped by then!? But how can this happen?

To achieve this goal for the endangered leftovers of agro-biodiversity, it would be highly necessary, that the public sector assists farmers in their breeding-activities!

No more centralized breeding-activities, but breeding-sciences and organic breeding-companies should meet the farmers in their regions and in their fields and assist them in their daily work. This so-called *Participatory Plant-Breeding* has shown up to be extremely successful wherever it has been set into effect.

We therefore ask all governments, who call for the development of a new agro-biodiversity, to invest into these activities! This step could bring a new dynamic into reestablishing agro-

biodiversity, and by that, fulfill the demands of many consumers for good and healthy food from local producers!

The discussion about those new forms of peasant- and participatory plant-breeding is still at a very early stage, but never the less, we are hopeful, that practical work will increase.

# SOFTENING THE GMO-SEED-SAFTEY-STANDARDS IN THE EUROPEAN UNION WOULD BE THE BIGGEST SINGLE THREAT FOR THE DEVELOPMENT OF AGRO-BIODIVERSITY!

Although we see quite encouraging developments in some national European GMO-politics at the moment, all European organizations working for GMO-Free-Seeds are warning strongly against any softening of GMO-Seeds-Saftey-Standards within the European Union. At the moment we have a 0,0 % - standard, meaning, that seeds must not be contaminated by a single GMO-kernel!

The on-going discussion, saying, that 0,0 % would not be realistic, because of technical reasons, is just an extremely dangerous opening of a door, where GMO's would infiltrate agriculture rapidly.

This threatens especially all those farmers and gardeners who grow seeds of their own varieties and thereby deliver the most important contribution for the development of new agro-biodiversity.

If we move away from this 0,0 % -rule, in fact those farmers and gardeners are highly endangered to become the ones, who spread GMO's themselves! This would not only undermine the intentions of these agricultural pioneers, who are definitely struggling for a GMO-free agriculture, but it would endanger agro-biodiversity as a whole!

Therefore we ask you not to lean back in your fight for a GMO-free agriculture, just because of some of those currently hopeful developments.

"0,0 % GMO-FREE SEEDS IS A MUST!"
FOR GMO-FREE AGRICULTRE AND FOR THE SAKE OF AGRO-BIODIVERSITY