

Beyond donations: A story of responsibility and benefit sharing

Abstract for the Conference *Promoting Organic Plant Breeding in Europe*, Brussels, Nov. 29, 2018, Johannes Wirz

Johannes Kotschi and I have shown that non-profit organic plant breeding is subsidised by foundations and private donors to a large extent. It disposes of some 4 Mio Euros, annually. In contrast, the budgets of the private and public sector add up to 850 and 40 Mio Euros, respectively. Two things must be mentioned: The sales of the private sector (e.g. Syngenta, Bayer etc.) include some 95 per cent of the varieties used by ecological farmers and gardeners. The public sector restricts itself almost exclusively to breeding research, the input in practical breeding is marginal. The dire finances of organic breeding are in striking contrast to the sales of the organic food market that has amounted to 30 billions Euros in 2015 (<https://www.statista.com/topics/3446/organic-food-market-in-europe/>) and may well surpass 40 billions in 2018.

In our study “Seed as a Commons” (2017) Peter Kunz, Ueli Hurter and I have outlined that organic breeding is creating three kinds of properties. Its varieties improve the agrobiodiversity and contribute to the cultural property. Organic seeds contribute to Ecosystems services organic farming abdicate synthetic fertilizers, pesticides and herbicides. In addition, under best practice conditions some 300 to 500 kg/ha/yr of CO₂ is sequestered as topsoil. All these benefits improve the common goods water, air and soil. Finally, seeds are also a private good traded and purchased accordingly.

With this distinction we hope to provide good arguments for the support of organic breeding by governments and governmental agencies, since they address agrobiodiversity and eco system services (ESS) in their political agendas. So far, the CAP of the EU and national agriculture programmes have not considered to allocate subsidies to organic plant breeding and they are unable or unwilling to do so. Apparently they are reluctant to acknowledge the contribution of ecological breeding to ESS or biodiversity.

For the third kind, i.e. private property we have proposed the idea of a Crop Plant Per Mil (CPPM) for the first time. Today, I would like to elaborate on the CPPM further – based on “think tanking” by Peter Kunz.

With a grain of salt and dependent on seeds and crops the added value from the breeder to the counter equals a factor of one thousand. Since this number has to do with the quality as well as the quantity of the produce of ecological production the CPPM is not a donation but a fair benefit sharing – and, ethically spoken, a responsibility of processors, traders and retailers altogether.

There are several possibilities to handle the CPPM. It could be charged at the end of the chain, i.e. the retailers, or alternatively, at every point of sale (POS), i.e. from processors, wholesale and retailers. By this, all the stakeholders would participate in the CPPM benefit sharing. Different regularities might be envisaged: A block chain app could be used with which the CPPM could be transferred at every POS directly to a breeding organization selected by the sellers, or deposited in a CPPM account.

The CPPM transferred to a credit card (as it is done already by the surprize model of a credit card company) or to a consumer’s loyalty card. Consumers could be invited to direct the CPPM to the breeding initiative of choice. In both cases the decentralized procedure would prevent costly and slow administration!

For the distribution of the CPPM decision making processes must be facilitated by tools of transparency and traceability to provide the stakeholders with information on the origin of the produce, the seeds and the breeding organisations – and to uncover which produce originate from conventional seeds (derogation).

We believe that the CPPM will help to strengthen and diffuse the basics of ecological breeding and the task of all the stakeholders from the producer to the consumer to secure existing breeding initiatives and to promote the development of new ones (see last slide point 1-4).

We are aware that the introduction of the CPPM is not a fast track endeavour and requires a lot of communication, efforts of convincing and lobbying. But we are looking forward to seeing the first prototypes created.