

Sowing the future!

Challenges and Chances for Biodynamic crop breeding

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Today's Challenges...

- Climate change
- Rapid decline in agrobiodiversity
- Withdrawal of the state from research
- Monopoly in the seed market


...make independent agro-ecological crop breeding
more important than ever before!

Organic Breeding means Conservation & Development...



Gene pool conservation
→ Looking back

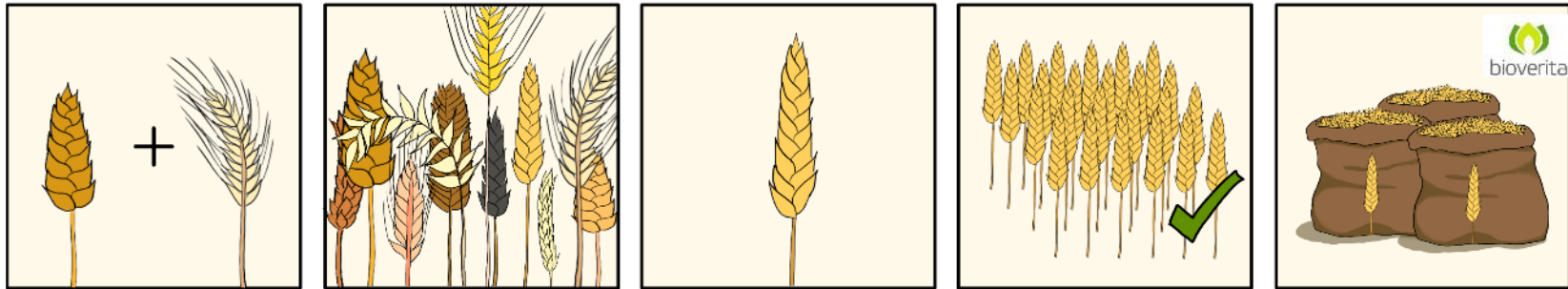
- **Maintaining agrobiodiversity through pre-breeding**
- ***In situ* variety screening to maintain broad basis material for further breeding**



Develop high quality crops
→ Looking to the future

- **Breeding of high quality varieties according to today's requirements of cultivation and processing**
- **Selection of locally adapted plants and agricultural ecosystem specific variety recommendation**
- **Breeding for complex cultivation systems (i.e. mixed crops)**

Organic Breeding Process



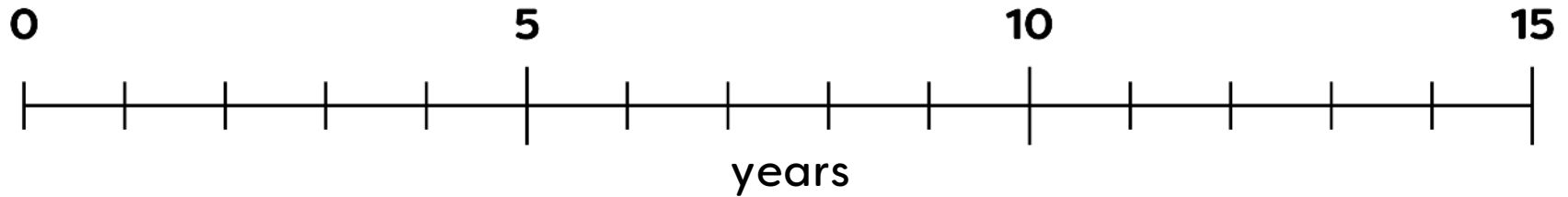
Crossing

Population

Selection

Variety
testing

Propagation



The long way from the crossing to a variety

What makes an Organic Variety?

Plasticity

- Breeding in a variety of different environmental conditions
- Varieties entering into a "dialogue" with the environment

Plant Health

- Tolerance instead of resistance

Resilience

- Capacity to buffer strict conditions with sufficient vegetative parts of plants

... Leads to stability in terms of yield and quality

What gzpk stands for

Organic
from the start!

Commons

As an
**independent
non-profit**
association we take
care of the
conservation and
development of
agrobiodiversity.

Since more than **35**
years we are breeding
organic crops -
the basis for organic
farming.



Regionally
anchored

We research in a
regional
context and breed
locally adapted
organic varieties.

Where we are based



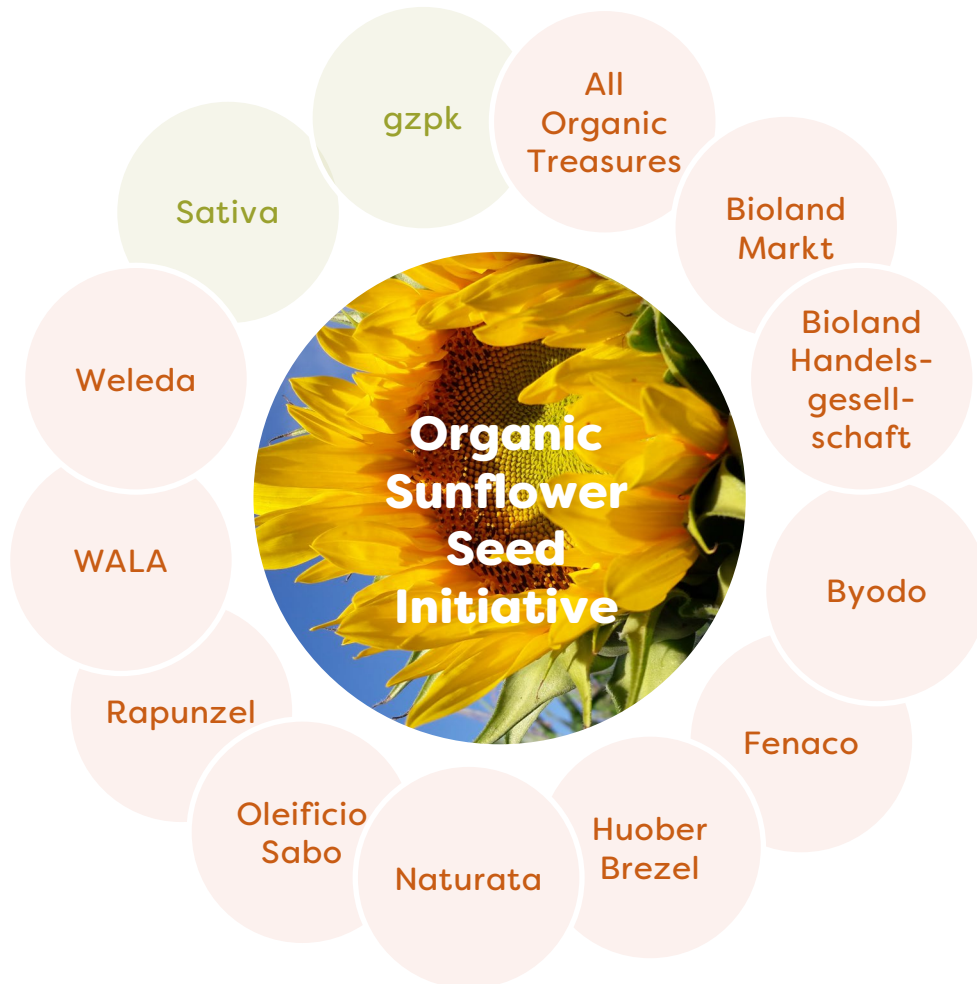
... with various testing sites on biodynamic farmer's land in Switzerland, Germany and Italy

What we work on



... where gzpk is the only organic breeding organisation in Europe with varieties in CH, F, D, CZ, P, IT, GB, LV

Value Creation through associative collaboration



Ensuring **access** to GMO-free seeds

Ensure **independence** from large corporations

Ensure **reproducibility** of seeds

Breeding for **early** population varieties for the northern climate and **high oleic** acid contents

Questions during the process

Variety registration?

Legal framework for populations

Question of Property?

Exclusivity, «Club», contract farming, commons?

Organisation of Multiplication

Responsibility for seed quality

**Thank you for your
attention!**

