

# Organic plant breeding in Switzerland – without GMO's ! Sweet Corn breeding



## Sativa Rheinau AG:

- Part of the project Fintan
- 60 multiplying farms = 500 ha seed production
- > 400 different varieties of vegetables
- Conservation of old vegetable varieties
- Organic breeding for organic agriculture



**Own vegetable breeding programmes in:**

- aubergine, brussel sprouts, carrots, celeriac, courgette, kohlrabi, onions, sweet corn ...

**Partner for other breeding programmes:**

- Getreidezüchtung Peter Kunz:
- New varieties for organic farming in
- wheat, spelt, mais, sunflower ...
- [www.gz.peter-kunz.ch](http://www.gz.peter-kunz.ch)
- [www.avenirseem.ch](http://www.avenirseem.ch)



**ZUKUNFT SÄEN!**

**Sweet corn – global situation:**

- Only 4 breeder left on the world
- Commercial seeds are produced to nearly 100% in USA
- Breeders are also working with gmo techniques
- Sweet corn is completely produced by using F 1 hybrid varieties of sh2 type

## Sweet corn – problems with cross pollination !



## Targets of the Sativa sweet corn breeding programm:

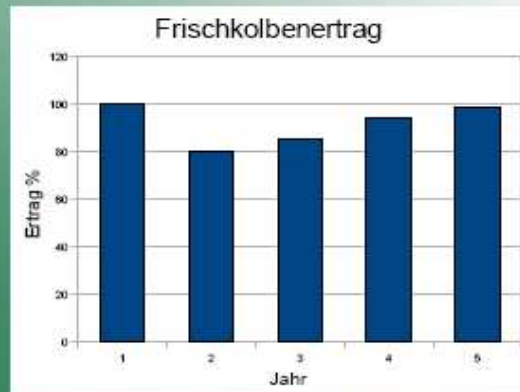
- Open pollinated varieties in sh2 - type
- > 95% of the yield of the most frequent F1 hybrid varieties
- Adaption to the needs of organic agriculture
- Question the dogma of hybrids
- „Open Source Seed Ware“
- Make GMO free sure on a long-term basis

- 2004: testing of 60 different hybrid varieties (sh2)
- 2005: cultivation of F2
- 2006: crossing generation
- 2007 – 2010 intense selection under organic conditions
- 2010 official registration of 5 new varieties



Important question:

Are hybrids the only way to have high yields ?



How can we finance independent breeding ?

- Own resources of Sativa
- Contributions to projects
- donations



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sativa  
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Testing of new lines on  
organic farms in

- Aargau (CH)
- Near lake of Constance (D)
- Alsace (F)



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Protection of gmo free  
breeding work and  
gmo free seed  
production in our  
region is essential

[www.gen-au-rheinau.ch](http://www.gen-au-rheinau.ch)



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