



Organic apple cultivation in the world

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Fields of competence



Fruit growing



**Viticulture and
Enology**



Mountain agriculture



Special crops



Plant protection

Agriculture



**Fermentation and
Distillation**



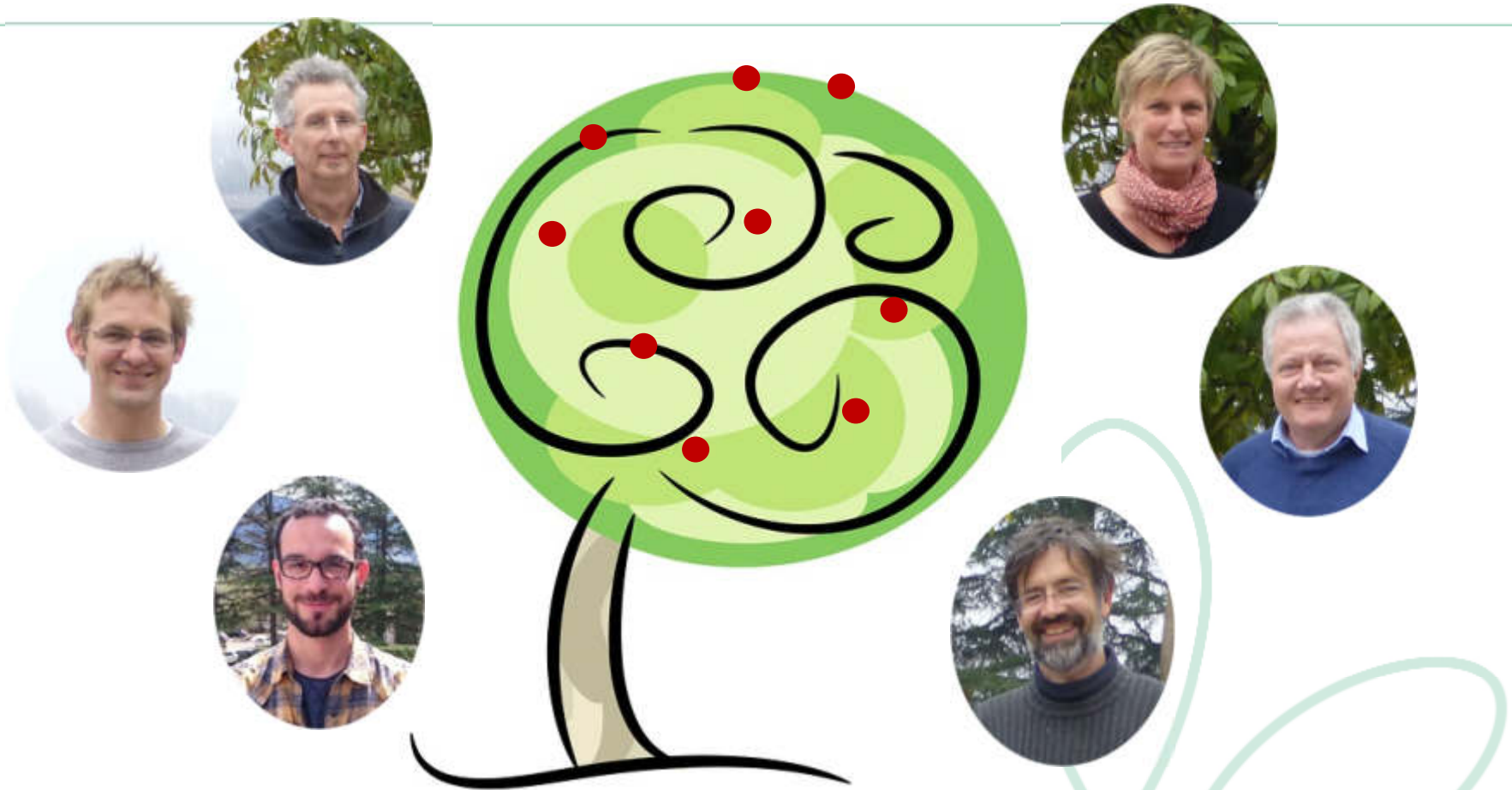
**Fruit and vegetable
processing**



Sensory science

Food science

Workinggroup: Organic Farming



What we do...

- Design and execution of experiments
- Training and consulting for farmers
- Supervision of trainees and students
- Management of approx. 3 ha of organic apple orchards (for field trials)



Where did I come from?



- Largest closed apple-producing region in the EU (18.000 ha)
- Apple cultivation takes up about 2.5 % of the overall area of South Tyrol
- 8,000 family-run farms (average farm is between 2.5 and 3 ha)
- The annual harvest amounts to approx. 950,000 tons
- The share of biological production is about 10% (tendency increasing)

South Tyrol

- South Tyrol is today Europe's largest organic apple supplier
- Climatic conditions of South Tyrol are ideal for apple cultivation.
- High degree of organisation of the farms, (joint consultation, storage and marketing)
- Strong focus on table fruit market
- less "culture of processing" than other fruitgrowing areas.



Organic farming

Defenition:

In contrast to conventional agriculture, organic farming is **legally obliged** to largely dispense with synthetically produced pesticides, mineral fertilizers and green genetic engineering. No flavor enhancers, artificial flavors, artificial colorings or artificial preservatives may be added to organic agricultural products before they are sold as organic food.

Attention:

Organic standards are not identical among all countries, also different labels have different standards!!



Organic fruit production

Organic fruit production was one of the later branches of organic cultivation in Europe. The first few pioneer fruit growers in several European regions started organic fruit production with little or no scientific support in the 1970s.

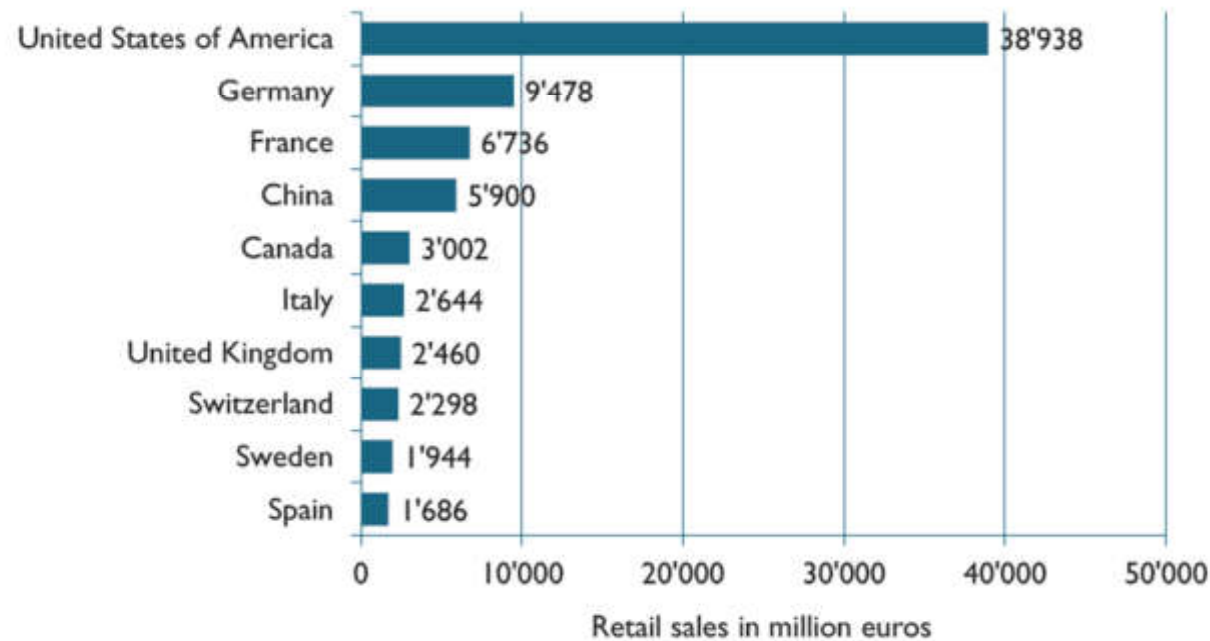
The most important challenges for the future are:

- Development of varieties and rootstocks suited to organic farming systems
- Improvement of the management of soil fertility in organic fruit growing
- Improvement of the strategies for plant health care in organic fruit growing
- Improvement of the ecosystem services of organic orchards

Organic markets

The ten countries with the largest markets for organic food 2016

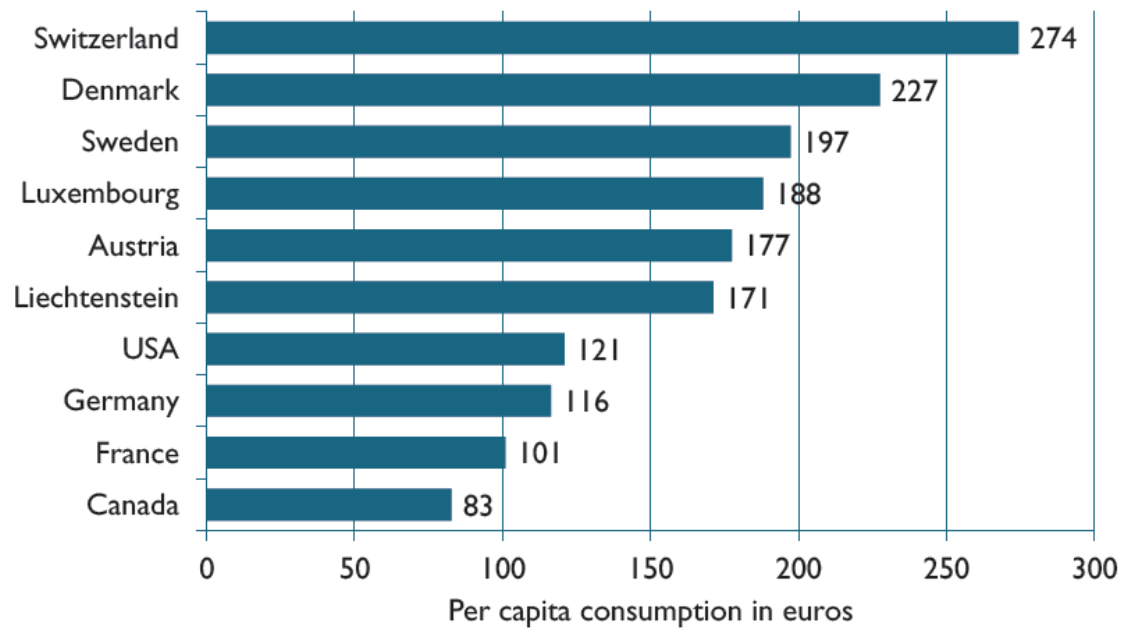
Source: FiBL-AMI survey 2018



Organic markets

The ten countries with the highest per capita consumption 2016

Source: FiBL-AMI survey 2018



Global markets

Europe and North America are currently the main markets for organic apples and apple products. Consumer in this regions are more aware of various food attributes like:

- Syntetic pesticide residues,
- Genetic modification of organisms
- Preservatives and additives
- Nutrient and antioxidant content
- Etc.

=>420% of growth of organic agricultural land since 1999!!

Organic apples area

Table 31: Temperate fruit: Organic area by crop 2016

Main crop	2016 [ha]	Change 2015-2016 [ha]	Organic share [%]
Apples	82'983	2'038	1.6%
Apricots	22'940	4'723	4.0%
Cherries	15'924	3'671	2.4%
Peaches and nectarines, no details	10'877	1'023	0.7%
Pears	15'376	5'264	1.0%
Plums	15'871	2'679	0.6%
Pome fruit, no details	1 190	-2751	-
Quinces	81	30	0.1%
Stone fruit, no details	5096	-5186.3	-
Total*	254'600	-8'414	2.0%

Source: FiBL survey 2018

*Total includes temperate fruit areas for which no details were available

Organic apples area

Temperate fruit: Use of organic temperate fruit area 2016

Source: FiBL survey 2018

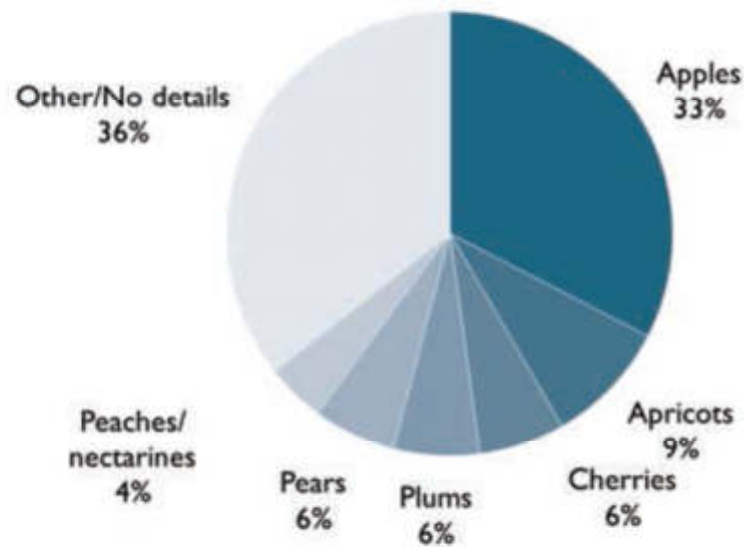


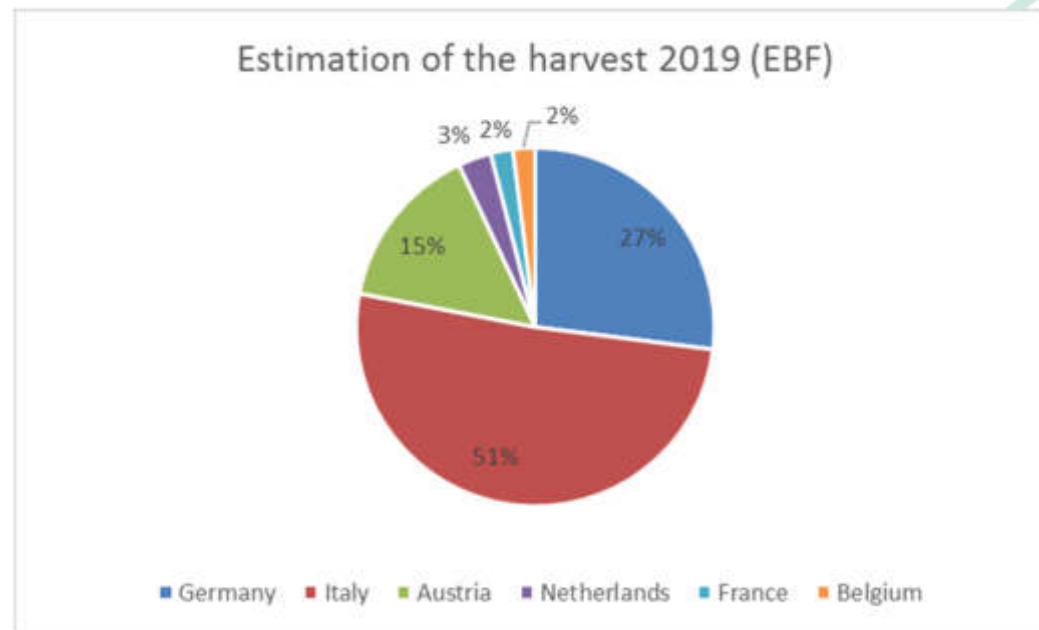
Figure 36: Temperate fruit: Use of organic temperate fruit area 2016

Source: FiBL survey 2018

Organic apples quantity ?

At the moment impossible to get reliable global data...

According to EBF estimation (Europäisches Bioapfel Forum) 71.400 t. in Europe 2019, but the EBF estimate covers only about 50% of the quantity produced in Europe.



Danke für Ihre Aufmerksamkeit.
Grazie per la Sua attenzione.
Thank you for your attention.



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