

Organic Knowledge Update

Fruit

February 2011

Organic fruit production in the Netherlands

Apples and pears are the most important organic fruit crops in the Netherlands. Smaller crops, such as berries and grapes for wine production are up and coming. Around 50% of the total Dutch organic fruit production is exported. To be able to facilitate organic fruit growers, Wageningen UR and the Louis Bolk Institute carry out a variety of research aimed specifically at organic fruit production. Hot topics are the prevention and control of scab and black rot and the development of new varieties.



Dutch fruit sector

Early 2009 there were about 35 organic fruit growers in the Netherlands. Apples and pears are the most important organic fruit crops, with 244 and 93 hectares respectively. The production of small soft fruits such as currants, berries and brambles is on the rise (114 hectares). A much smaller acreage is dedicated to organic cherries and plums. Around 50% of the total Dutch organic fruit production is exported.

The domestic market for organic fruit grew by 5,1% in 2009, grossing € 26,3 million. Compared to neighbouring countries, these figures are relatively low. Over half of all organic fruit is sold in supermarkets.

→ Aspirations

The Dutch organic fruit sector aims to remain the most sustainable fruit producing sector in terms of economics, environment and societal aspects. The sector wants to produce fruit that is more disease-resistant and is easily discernable by consumers. Preventative measures against pests and diseases and attention for the smaller fruit sectors and wine production are also important. The organic fruit sector has a tradition of developing knowledge on real-life fruit farms, supported by consultants and researchers.



Current affairs

Apples and pears are by far the most important Dutch organic fruit crops. Smaller crops, such as berries and wine production are up and coming, but do not have a large production yet.

Emphasis will continue to lie on the prevention and control of the main diseases in apples and pears: scab and black rot. As copper products cannot be used, and most other products are relatively weak, much is expected of new scab-resistant apple varieties. In recent years a few of these varieties have already been developed and brought to market. This process is complex and much can still be improved and learned. Organic apple growers from The Netherlands will participate in a pilot with German growers to evaluate a new scab resistant and powdery mildew tolerant apple cultivar. In recent years research for the organic fruit sector also focuses on the effective use of new biological products against scab.

Dutch wineries provide a relatively new field of research. To improve wine production and quality, vine varieties that are suitable to Dutch circumstances need to be developed and tested.



Santana apples are non-allergenic



The Dutch wine sector is small but growing

Research projects

- **Product quality in the organic fruit supply chain** Opportunities for scab-free apple varieties are plentiful if appearance and shelf life of these varieties improves. Developing quality control tools and researching measures to improve storage are part of this project.
Contact: Frank Schoorl, Frank.Schoorl@wur.nl
- **New organic fruit cultivars** This project aims to develop new cultivars, specifically developed for organic production.
Contact: Rien van der Maas MSc, Rien.vanderMaas@wur.nl
- **Controlling replant disease** This research project develops non-chemical control measures against replant disease in organic apples, caused by *Pratylenchus penetrans*.
Contact: Marcel Wenneker MSc, Marcel.Wenneker@wur.nl
- **System innovation in organic pear-production for scab prevention** Prevention of scab in organic orchards through better (novel) management practices with the aim to reduce dependency on phytotoxic plant protection products. Conference and Concorde varieties are looked into.
Contact: Bart Timmermans, B.Timmermans@louisbolk.nl
- **New products to control scab in apples and pears** This project aims to develop new products for controlling scab in apples and pears. For pears, potassium bicarbonate will be looked into.
Contact: Peter Frans de Jong, Peterfrans.deJong@wur.nl
- **Organic cultivation of small fruits** The organic production of small fruits such as red currants, brambles and raspberries encounters its own specific problems. This project aims to improve biological control of the main diseases in these fruits and to develop more knowledge on these diseases.
Contact: Marcel Wenneker MSc, Marcel.Wenneker@wur.nl
- **Vinification of new grapevine cultivars** Knowledge on vinification of new cultivars in the Netherlands is limited. This project aims to fill the gap and develop guidelines for vinification of both new and old cultivars, under Dutch growing conditions.
Contact: Rien van der Maas MSc, Rien.vanderMaas@wur.nl
- **Choosing the right cultivars and vines** This project helps organic wine farmers in choosing the right cultivars for the circumstances on their farms. This helps improve Dutch organic wine quality.
Contact: Dr. Frank Maas, Frank.Maas@wur.nl
- **Testing a warning system against downy mildew in organic grape cultivation** Since copper is not allowed in Dutch organic production, downy mildew can only be fought with relatively weak products. Using a warning system to find infestations at an early stage may help.
Contact: Dr. Bart Heijne, Bart.Heijne@wur.nl
- **Thinning of apples and pears** This project looks at the possibilities of mechanical thinning in apple and pear trees.
Contact: Bart Timmermans, B.Timmermans@louisbolk.nl



Organic fruit growers meet on a regular basis to exchange experiences



Conference is the most common pear variety in the Netherlands

Literature

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New varieties come with new problems: Topaz apples may develop so-called Topaz spots

Bioconnect aims to further develop and strengthen the Dutch organic sector by initiating and implementing research projects. Within Bioconnect organic entrepreneurs (from farmers to shop-keepers) work together with research institutes, colleges and universities and consultancy organisations. This leads to demand-driven research that is unique to the Netherlands.



The Ministry of Economic Affairs, Agriculture and Innovation sponsors these research projects.



Ministry of Economic Affairs,
Agriculture and Innovation

Wageningen UR (University & Research centre) and the Louis Bolk Institute together carry out these research projects. About 140 projects dedicated to organic agriculture are currently under way.



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