Framtiden för ekologisk production av äpple i Finland -möjligheter och hinder

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Framtidens ekologiska produktion av äpple i Norden -seminarium
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Apple production in Finland
-Hectares

2013: in total 660 ha of which 67,1 ha organic

- Most of the apple cultivation is in Åland, Egentliga Finland and Nyland: 80 %
- Organic apple area distributed more evenly through the country

Organic area in red
Total area in black
Apple production in Finland
-Farm size and yield

Organic statistics 2007-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>ha in yielding age</th>
<th>ha/farm</th>
<th>kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>31</td>
<td>0,7</td>
<td>225,8</td>
</tr>
<tr>
<td>2008</td>
<td>19</td>
<td>0,4</td>
<td>1443,9</td>
</tr>
<tr>
<td>2009</td>
<td>25</td>
<td>0,4</td>
<td>960,0</td>
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<tr>
<td>2010</td>
<td>25</td>
<td>0,4</td>
<td>1160,0</td>
</tr>
<tr>
<td>2011</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>2012</td>
<td>40</td>
<td>0,7</td>
<td>3100,0</td>
</tr>
<tr>
<td>2013</td>
<td>31</td>
<td>0,5</td>
<td>1629,5</td>
</tr>
</tbody>
</table>

Farm size and yield 2013:
Apple area per farm in red
Yield per hectare in black

About 5 thousand tons yearly = 6-8 % of total apple consuming

Four "schools": Åland, Pikis, Russian, local

Organic statistics 2007-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>9058</td>
</tr>
<tr>
<td>1991</td>
<td>6777</td>
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<tr>
<td>1992</td>
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<td>1993</td>
<td>7938</td>
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<td>1994</td>
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<td>6786</td>
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<td>5783</td>
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<td>8013</td>
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<tr>
<td>2012</td>
<td>8215</td>
</tr>
<tr>
<td>2013</td>
<td>8316</td>
</tr>
</tbody>
</table>
• Varieties cultivated in Finland (statistics 2007): Lobo 27 % of the area
• In Åland most common varieties in old plantations is Lobo and in new thick plantations Raike, Summerred, Rubinola,
• In inland most common after Lobo are Kanels, Transparente Blanche, Amorosa, Pirja, Samo
• No particular organic variety in high volumes yet, but scab resistant varieties start to be popular for new plantations
Challenges in organic apple production

• Pests and diseases and plant protection chemicals
  – *Argyresthia conjugella* Rönnbärsmal
  – *Cydia pomonella* Äpplevecklare
  – *Venturia inaequalis* Äppelskorv
  – Fytoplasma Apple proliferation
  – *Erwinia amylovora* Päronpest

• Varieties
  – Scab resistance, storability, root stocks, winter hardiness

• Marketing
  – Too small plantations, too far from each other to have cooperation, too much varieties and unknown varieties, if selling to retailers ->too high price for consumers but hardly anything for the farmer

• Bureaucracy
  – Small group of farmers -> not enough voice, for example nitrate regulation

• Research and its financing
  – Only a few researchers working part-time with apple, challenge to get financing for so small production area and for applied research
Possibilities in organic apple production

• Organic and local food are in fashion
  – Also the government has aim to increase organic production
  – Apple production in other than main areas is seen possible and even an advantage
  – New ways of marketing: for example community supported agriculture
• Varieties are starting to be available
  – Scab resistance, good winter varieties = storability
• Organic apple production is in its beginning in Finland -> chance to gather knowledge and create cooperation models before starting
Testing new varieties

Testing fruit varieties from Russia, Ukraine, Belarus, Latvia and Estonia
-> aim to find varieties also to Central Finland
• Winter hardiness
• Scab resistance
• Taste and colour
• Storability

In black – For Southern Finland (I-II)
In red – For Mid-Finland (III-IV)
In blue – Also for the north (V-VI)
Summer varieties

**Agra**
Arkad letnij zholtiy
Avgusta
Ijulskoje Tshernenko
Jablotsnyj spas
Jelena
Jubiljar
Junost
Kalvil belyj letnij
Konfetnoje
Krasnoje ranneje
Mantet
Medunitsa
Metshta
Narodnoje
Orlinka

**Roberts**
Serebrjanoje kopytse
Solntsedar
Zhelannoje
Zhemtshuzhnoje

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Autumn varieties

Aelita
Afrodita
Antonovka zolotaja
Druzhba narodov
Gita
Izbrannitsa
Kovalenkovskoje
Kymppitonni
Marat Busurin
Orlovim
Orlovskij pioner
Orlovskoje polosatoje
Osennaja radost
Pamjat Isajeva
Podsnezhnik
Pärnu tuvioun
Sergiana
Severnaja zarja
Slava pobediteljam

Slavjanin
Solnyshko
Tambovskoje
Uslada
Zhanna

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Kovalenkovskoje
Solnyshko
Winter varieties

Aape
Alesja
Antej
Auksis
Babushkino
Beforest
Bolotovskoje
Cortland

Dace
Iedzenu
Imant
Imrus
Ivanovskoje

Jubilej Moskvy
Kandil Orlovskij
Koritshnoje novoje

Krista
Kulikovskoje
Kurnakovskoje

Martovskoje

Orlik
Orlovskaja zarja
Orlovskoje polesje
Podarok Grafskomu
Renet Karpova
Rozhdestvenskoje
Samorodok
Sinap orlovskij
Spartan
Start

Strojevskoje
Studentsheskoje
Svezhest
Sweet sixteen
Teremok
Tshistotel
Venjaminovskoje
Zarja Alatau
Zvezdotshka

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Venjaminovskoje
Pears
Djuimovotshka
**Kafedralnaja**
Karamelnaja
**Lada**
Skorospelka iz Mitsurinska
**Tshizhovskaja**
Vidnaja

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Plums

Diploid plums
Kubanskaja kometa
Skoroplodnaja
Podarok Sankt-Peterburgu

Hexaploid plums
Evrazia21
Garmonija
Renklod mitshurinskij

In black – For Southern Finland (I-II)
In red – For Mid-Finland (III-IV)
In blue – Also for the north (V-VI)
Sour cherry Schedraja has succeeded in zone VII in Salla, Lapland.
Thank you!