LIVESEED Apple task Workshop- BIOFACH 2019

Organic apple breeding in Europe- Common strategy and networking to face organic sector challenges and market opportunities

Organic apple in Greece

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Environmentalist - Organic apple farmer BioFru
AEGILOPS heritage variety nursery

15th of February 2019, 9.00 to 13.00
Nuremberg Convention Center, NCC Mite, room Lissabon
Organic agriculture in Greece

- Directorate of Organic Agriculture of MRDF
- AGROCERT (certification and labeling body)
- 11 eligible certification bodies
Organic agriculture in figures

- **Total organic area:** 342,584 ha (6.5% of total)
- **2,187 producers, 1,495 processors, 20 importers, 69 exporters**
- **Main Greek organic products:** olive oil, olives, wine, and grain

Source: Ministry of Agricultural Development and Food (2016)
Organic apple farming - area

Organic apple farming in Greece

Source: Ministry of Agricultural Development and Food (2016)
Organic apple farming - varieties

- Red delicious (Starking)
- Gala
- Fuji
- Golden delicious
- Granny Smith
Organic apple market

- Fresh fruit 90%
- Exports: <10% mainly to Italy, England
- Imports: mainly from Latin America

- S/m
- Retailers – Organic stores
- Folk market
Decreasing trends in organic apple production
Fruit trees are not subsidized by EU agro environmental funds
Institutional and scientific gap on organic (fruit) production support
Difficulties in production (primarily insects’ attacks & secondly fungal diseases and viruses)
Absence of organic nurseries or varieties
Organic farm “BIOFru” – Vasileiada
Kastoria, Greece

- 1993: Pioneer of organic farming in the wider region of Kastoria
- 1996: Officially certified organic apple and pear farming (by BIOHELLAS)
- 2014: AEGILOPS’ heritage variety nursery (preservation of traditional fruit tree varieties)
- Today: Cultivation of 3.7 hectares in total (3.5 ha apples & 0.2 ha pears)
Organic farm “BIOFru”

- Cultivated varieties:
  - Red delicious (Red chief, Super chief, Scarlet, Jeromine), Gala, Fuji, Jonagored, Granny Smith, Golden delicious

- Parallel activities in the farm:
  i. Preservation of old varieties: fruit, vegetables, vines
  ii. Involvement in the Greek organic farming movement
  iii. Demonstrations and training
  iv. Member in producers’ – customers’ cooperative
AEGILOPS heritage variety nursery

- Seedlings
- Rootstocks: M9, M111, firiki and grafting
- Transplantation and evaluation of the young trees
- Search for old varieties in the wider region
- Conservation of 20 apple & 20 pear varieties and wild apple rootstocks
Traditional varieties

- Firiki
- Krasomilo
- Kidonomilo
- Skioupia
- Pilafa

Rootstocks
- Firiki
- Wild apple (red, yellow)
AEGILOPS - Network for Biodiversity and Ecology in Agriculture

- Founded in 2004 - Network of ecofarmers in Greece
- Mission: the preservation - recultivation of local varieties / heritage crops and the development of varieties and seeds adapted to local conditions and organic farming
Pomology Institute -
Directorate General of Agricultural Research
Hellenic Agricultural Organization DEMETER

Current project: *Fruit Trees 2 Safeguard*

Promoting fruit tree cultivation though maintaining and organizing the field gene bank collection, creating parent plants for the production of certified propagating material and evaluating, exploiting and improving autochthonous cultivars.
What varieties we need in Greece?

- Organically bred fruit tree varieties
- Suitable for organic farming (e.g. resistance to fungal diseases/ insect attacks)
- Yield stability
- Long shelf life
Suggestions

- Find solutions and share experiences on important organic crop production issues
- Scan and valorize domestic apple biodiversity
- Bring adapted organic varieties to the market
- Meet consumers needs
Organic farm “BIOFru”
An (organic) apple a day keeps the doctor away!!!

Thank you! - Danke!