

List of varieties suited for organic table apple production in Central Europe

Problem

Apple production is a high-input crop facing many challenges regarding disease and pest control. Especially in organic farming, the use of direct control measures is limited and the indirect control measures, such as the choice of robust cultivars, is of high importance.

Solution

Robust cultivars, which are tolerant to apple scab, powdery mildew, and fireblight, help to control these main diseases that occur in central Europe and reduce the need for direct control measures.

Benefits

The use of robust apple cultivars can contribute to the reduction of plant protection applications.

Applicability box

Theme

Crop production, Horticulture, Temperate fruits

Keywords

Temperate fruits, disease prevention, apple, cultivars, varieties

Context

Central Europe, table apple production

Application time

When planting a new orchard

Practical recommendations

How to choose a variety?

Ask yourself the following questions to choose a suited variety for your production context:

- Do I want to produce **table apples** or cider apples? (this PA is only relevant for table apples)
- Do I want to reach a certain **yield**?
- How intensively do I want to practice **plant protection**?
 - Which **diseases** are most common in my orchard?
 - Which **pests** are most common in my orchard?
- Do I want to sell the apples to a **retailer** or via **direct marketing**? If you want to sell to a retailer, you have to check which varieties they accept before planting. If you want to directly market your apples, you might consider having a broad palette of varieties covering all taste groups and a longer selling period.
 - Which **palette of varieties** regarding the taste do I want to offer?
 - Which **harvesting periods** do I want to cover?
 - Do I have **storage capacities**?

Contact your regional advisory service for specific variety recommendations according to your growing conditions and needs.

Table 1. List of table apple varieties suited for organic table apple production in Central Europe.

Variety (yellow=sweet, red=balanced, green=sour)	Susceptibility			Yield	Storability (CA ¹ storage)	Comments
	Apple scab	Powdery mildew	Fireblight			
Autumn varieties						
Rubinola *	•	•	•	•••	December	
Ladina*	•	•	•	••	January	Exotic flavour
Florina*	•	••	••	••	January	

Variety (yellow=sweet, red=balanced, green=sour)	Susceptibility			Yield	Storability (CA ¹ storage)	Comments
	Apple scab	Powdery mildew	Fireblight			
Storage varieties						
Inored (Story)*	•	••		•••	June	For southern Europe only
WUR37 (Freya)*	•	•		•••	May	Jonathan spots occur
Goldrush*	•	•••	•	•••	July	Very late ripening
Xeleven (Swing)*	•	•	•	•••	August	Very late ripening
Dalinette (Choupette)*	•	•	•	•••	June	
Santana*	•	•••	••	•••	January	
Opal*	•	••	••	•••	March	Russetting-susceptibility
Bonita*	•	•	•	•••	May	Neofabraea- Susceptibility
Topaz*	•	•	•••	•••	May	Neofabraea- Susceptibility
Pinova*	••	••	•••	•••	May	Neofabraea- Susceptibility
SQ159 (Natyra)*	•	•	••	•	July	Alternate-bearing, low vigour
Rustica*	•	•	•••	•••	June	Russetting -susceptibility
Ariane *	••	•	•	•••	July	Small fruits

*Apple scab resistant varieties (Vf resistance). Plant protection is still needed to avoid the resistance to be broken.

¹CA= controlled atmosphere. For cold storage the storage length can be shorter depending on the temperature and composition of the atmosphere.



Picture 1. Ladina, Photo: C. Boutry, FiBL



Picture 2. Rustica, Photo: C. Boutry, FiBL



Picture 3: Opal, Photo: C. Boutry, FiBL



Picture 4: WUR37, Freya, Photo: C. Boutry, FiBL

Further information

Further reading

- [Recommended varieties for organic pome fruit production \(apple, pear\)](#). FiBL and Bio Suisse. (DE, FR)
- Pedersen, H. L., Bojesen, M. 2022. [Apple scab \(*Venturia inaequalis*\): Robust cultivars for Northern Europe](#). Hortiadvice. BIOFRUITNET.
- Oeser, N. 2022. [Apple scab \(*Venturia inaequalis*\): Robust cultivars for Central Europe](#). FÖKO. BIOFRUITNET.

Weblinks

- Check the [Organic Farm Knowledge](#) platform for more practical recommendations.

About this practice abstract

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