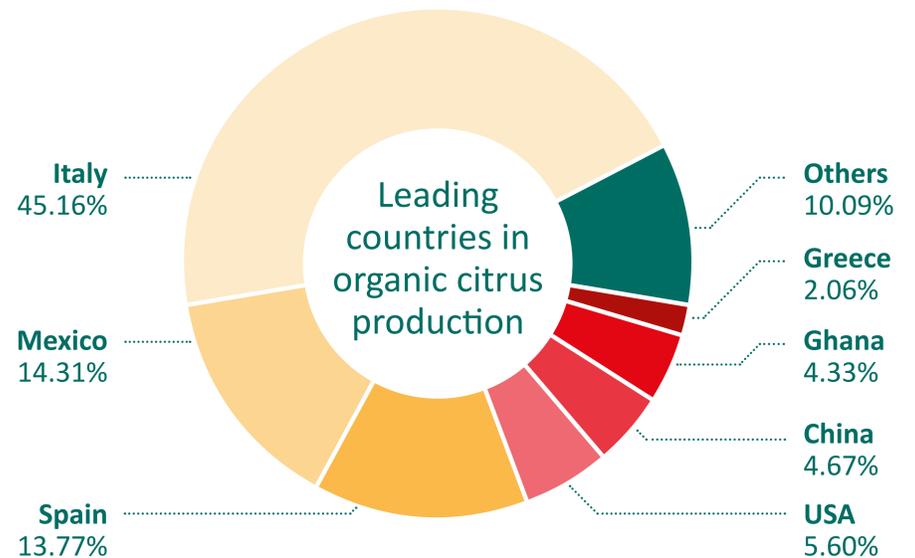


BIOFRUITNET: Innovative solutions in European organic citrus fruits production

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Citrus fruit

Citrus is the most extensively cultivated tree fruit crop in the world, grown in more than 140 countries. Citrus plays an important role in organic farming systems, being one of the most highly demanded products on the market, particularly for organic citrus juices. Some European countries belonging to the Mediterranean basin are considered the leaders in organic citrus production; among them, Italy is the main producer, representing more than 45% of the total world production area.



Challenges in organic citrus growing

Citrus fruits are severely affected by pests and diseases and characterised by poor economic plans. Since organic growers cannot rely on many synthetic inputs, they face difficulties to compete with the conventional fruit market.

The specific challenges are:

- Presence of widely distributed phytophagous species, which have significant economic importance



Citrus mealybug, *Planococcus citri*



Orange spiny whitefly, *Aleurocanthus spiniferus*



California red scale, *Aonidiella aurantii*



Mediterranean fruit fly or medfly, *Ceratitis capitata*

- Microbiological alterations by fungal agents (e.g. green and blue mould caused by *Penicillium spp*), or by physiological nature (due to the lack of orchard maintenance, wrong harvesting methods, incorrect handling of the fruits)



Blue and green mould mixed infection on sweet orange



Green mould on lemons



Citrus packing line

- Limited local guidelines and agricultural recommendations to avoid fruit losses and improve the qualitative production

BIOFRUITNET innovative solutions

- Improve the management of the organic citrus orchards, particularly on the preservation of soil fertility
- Restore biodiversity and improve the adaptivity of local “cultivars” to the selected environment
- Improve the use of natural resources and reduce the use of external inputs, safeguard of the marginal areas to increase the local agrobiodiversity
- Enhance biological control through the biodiversity valorisation

BIOFRUITNET objectives



Facilitate networks and interaction among citrus fruits growers, advisors and researchers



Promote the most important citrus varieties cultivated in organic farming



Identify the key limiting factors problems in organic management of the citrus orchards



Collecting locally found best practices and making them available to citrus fruit growers across Europe

BIOFRUITNET expected benefits



Improving management strategies (e.g. irrigation, soil fertility, pest and disease prevention and control)



Providing pre- and post-harvest methods to improve the shelf life of citrus



Sharing of best practices and model of valorisation of the organic citrus sector