

# BIOFRUITNET: Innovative solutions in organic pome fruits production

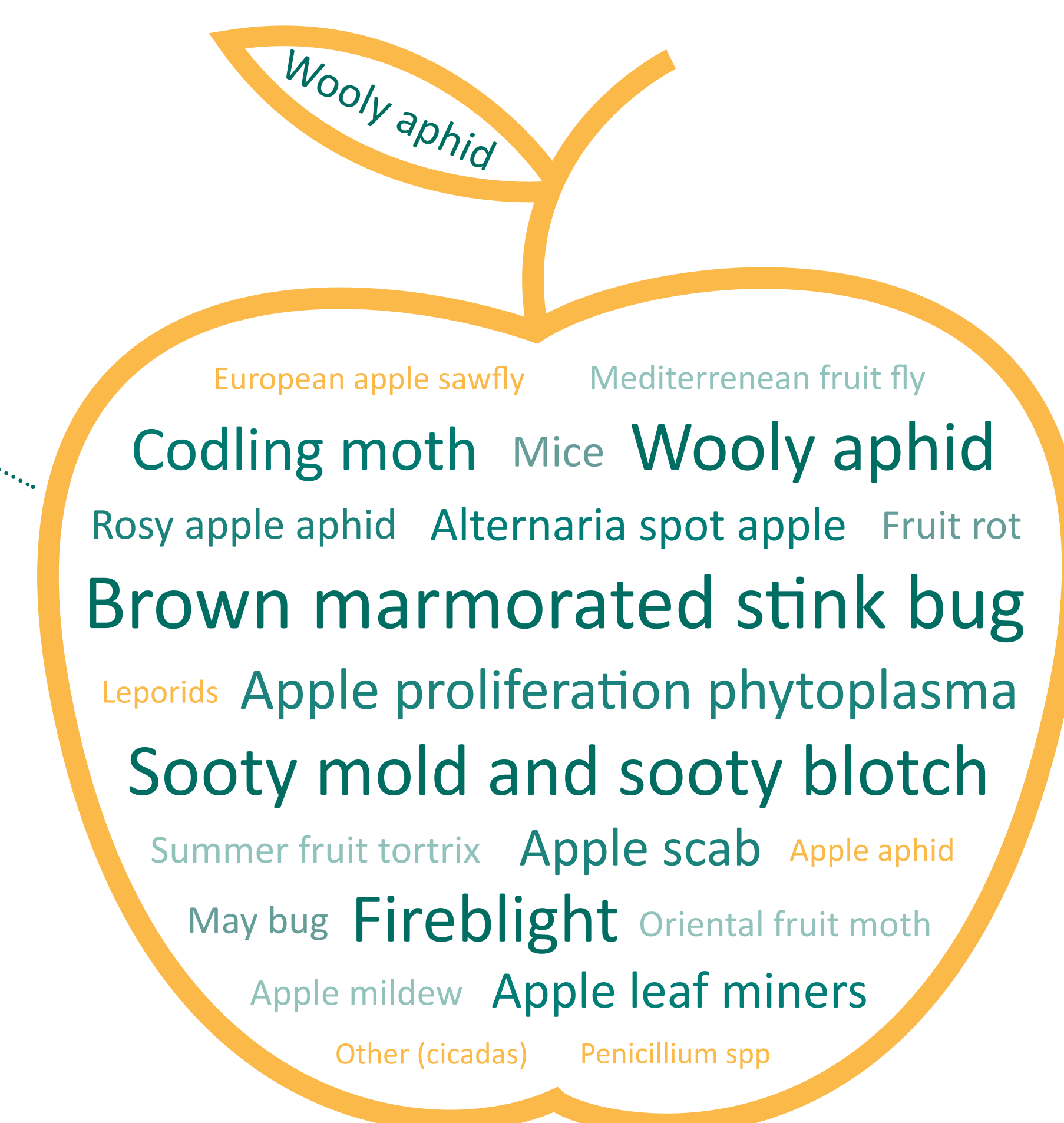
## Apple and Pears

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Major and secondary pests and diseases in South Tyrol region.  
Results of a survey among farmers, researchers and advisors

### Organic fruit production

Organic temperate fruits are currently grown on 111.006 ha in the EU corresponding to 8,5% of the whole temperate fruit area in the EU. The largest producer of organic temperate fruits is Italy with 27.326 ha. The most important organic temperate fruits are apples with 57.298 ha. In 2019 the production of table apples in the EU was estimated at around 500.000 tons (Europäisches Bioobst-Forum survey).



Brown marmorated stink bug – *Halyomorpha halys*



Codling moth – *Cydia pomonella*



Leaf spot apple – *Alternaria spp*

### Challenges in organic pome fruits growing

#### Pest and diseases:

- Commercially available cultivars are not always suitable for organic farming
- Accurate preparation of the soil for M9 rootstocks is not always possible in organic farming

#### Soil management and fertilization:

- Lack of knowledge by growers on the composition of fertilizers
- Apple replant disease (ARD)
- Mechanical weed control with high impact on the carbon footprint and leaching of nutrients
- Lack of efficient products for plant protection

### BIOFRUITNET innovative solutions

- Evaluation of new varieties with large genetic base and low susceptibility to the important pests and diseases
- Use of cover crops, resistant varieties, native low competitive species and new techniques for weed control
- Use of alternative and natural products for plant protection
- Collecting innovative sanitary strategies (e.g. increasing the functional biodiversity)



### BIOFRUITNET objectives



Identify the existing knowledge and gaps in organic pome growing (plant protection, varieties, and plant nutrition)



Select the most effective locally found practices to be implemented by organic farmers across Europe



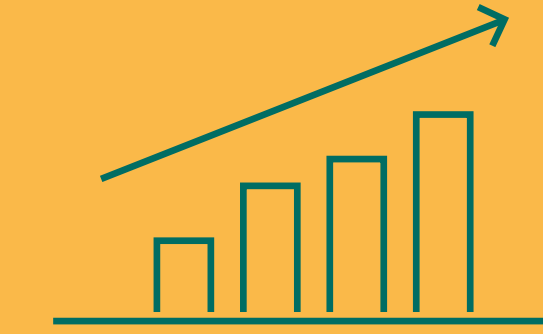
Evaluate the efficacy of the practical solutions, workload involved and costs / benefit ratio



Fostering flow of information among organic farmers and private associations across Europe



Sharing existing practical knowledge to improve pome fruits economy



Offering innovative solutions to increase organic pome production (higher yields, pests and diseases management, lower carbon footprint)

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