

## Practice Abstract No 42

## Composting waste in apple orchard



## Description

Apple residues are often considered a waste rather than a resource. In fact, orchard residues are part of an abundant biomass that can be considered a major alternative source of renewable energy. Composting is one of the best known methods of recovering nutrients from organic waste. Composting generally involves the decomposition of organic material (food waste, animal waste, crop residues and municipal waste) under regulated conditions. In the case of waste from apple orchards, fallen leaves, twigs and fruit are composted. Some soil and animal waste, e.g. excrement from livestock such as cows, horses, rabbits and chickens, should be added. In this way, we enrich the compost with nitrogen. In the course of composting, mineralisation and humification occur simultaneously, resulting in organic matter with a high humus content.

Compost also helps the soil to retain moisture - unlike synthetic fertilisers - so that the soil will cope better during drought. Compost also makes life more difficult for weeds and reduces the acidity of the soil. More fertile and better-watered soil also has a good effect on plants. With access to nutrients from the soil, plants will grow better. Despite its many advantages, composting also has disadvantages:

- Requires a certain amount of work and time
- Food waste in the compost attracts rodents
- The compost has to be turned over regularly every 2 months or so in order for oxygen to reach all layers of the compost and for the decomposition process to proceed properly
- There is a noticeable unpleasant smell in the first phase of compost production. These disadvantages can be offset by adding effective micro-organisms to the compost and by securing the compost heaps and placing them in locations away from residential houses.

## Author(s)

Maria Rembiałkowska,  
Justyna Obidzińska  
(Warsaw University of Life  
Sciences)

## Stakeholders

Producers, local waste  
management companies,  
Environmental  
organizations

## Country/Region

Poland

## Keywords

Biomass utilization,  
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## Pictures



## About CO-FRESH

The CO-FRESH project aims to provide techniques, tools and insights on how to make agri-food value chains more environmentally sustainable, socio-economically balanced and economically competitive. The project pilots several agri-food value chain innovations to see how they, in combination, can improve environmental and socio-economic sustainability.

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