

# Department of Horticultural Machinery

# Composting methods and technologies

Composting is the aerobic process of transformation of BW using aerobic microorganisms. The purpose of composting is not full biodegradation of organic materials, but their stabilization, eliminating any risk to soils from pathogenic processes and phytotoxic substances.

#### THE DIFFERENT COMPOSTING METHODS DEPENDING ON THE AMOUNT OF PROCESSED RAW MATERIALS ARE:

#### **HOUSEHOLD COMPOSTING**

Household composting is a composting method used by individual families to create compost from biological waste produced by their household. This chiefly concerns waste from garden maintenance and vegetable waste from the kitchen.

Household vermicomposters or compost bins located in the corner of the garden, are most often used for this method.



#### **COMMUNITY COMPOSTING**

A community of people uses community composting to transform the biological waste produced by the community into compost. This composting method may be carried out and used by any group of people, such as enterprises, schools and authorities. It is also used by fellow citizens from specific apartment houses.

The community takes biological waste to shared compost bins located in the designated place.



#### **CENTRAL COMPOSTING**

This is a composting method used by an entire town or municipality, during which all biodegradable waste from the municipality is taken to a central composting facility in the given region. These facilities most often use the windrow composting technology or so-called intensive composting technologies.

Organic waste is placed in the brown containers and their regular collection is assured using the municipality's collection schedule.



#### COMPOSTING REDUCES THE AMOUNT OF MIXED WASTE FROM HOUSEHOLDS BY UP TO 40%



# MATERIALS SUITABLE FOR COMPOSTING

- sorted waste of plant origin
- waste from garden maintenance
- cut grass
- fallen leaves
- wood chips
- wood shavings, sawdust, bark
- manure
- above-ground parts of plants, stems
- hay, straw
- coffee grounds and tea bags
- egg shells and nut shells



#### MATERIALS NOT SUITABLE FOR COMPOSTING

- waste of animal origin
- table oils and fats
- gastro-waste
- coal ash
- sawn timber, e.g. boards, battens
- building rubble
- hazardous waste
- plastic, rubber
- textiles, geotextiles, glass wool
- glass
- metal

# **EXAMPLES OF COMPOSTING TECHNOLOGIES**

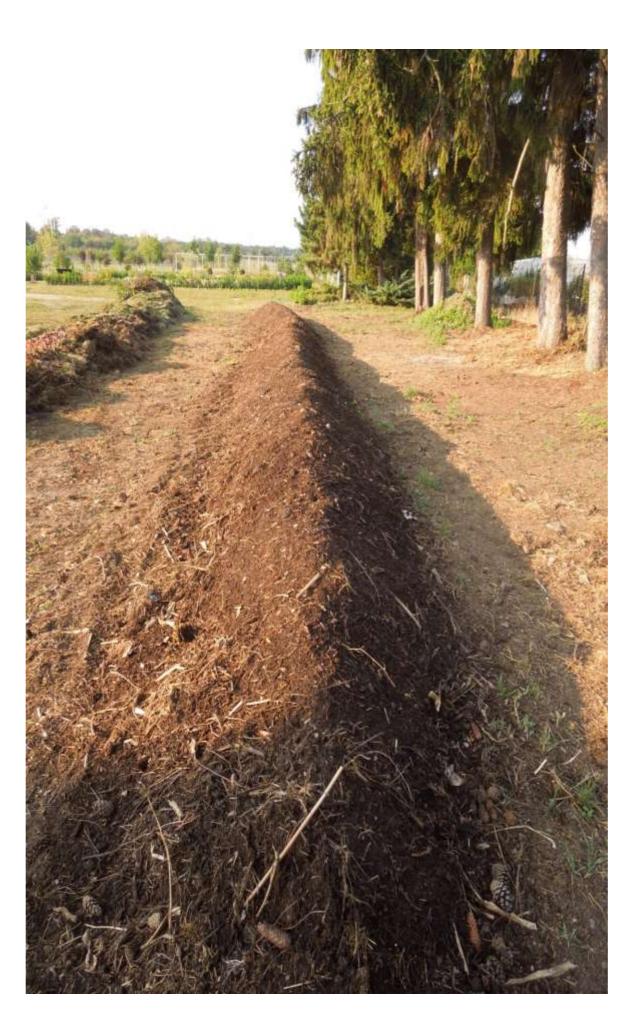
## **COMPOSTING IN COMPOST BINS**







## **COMPOSTING IN WINDROWS**



## **COMPOSTING IN BIOREACTORS**



