

Use of compost in medicinal and aromatic plant production

Benefits and good practice

Quality compost can bring many benefits to soil and plants. By providing organic matter, it supports healthier, more resilient plants with better growth and increased resistance to pathogens and environmental stresses. But unhealthy compost can be detrimental to plant growth.

This short guide explains the benefits of compost and how to best use it in medicinal and aromatic plant production to obtain healthy and abundant harvests.



Why compost?

Soil-borne pathogenic fungi and bacteria can pose a challenge in the production of medicinal and aromatic plants (MAPs) due to intensive cultivation methods, especially when several crops from the same plant family are included in the crop rotation. One possible preventive measure is to add antagonistic microorganisms to the soil through the use of compost, which can suppress pathogens such as *Pythium* and *Rhizoctonia*.

Compost is a valuable soil amendment. It plays an essential role in maintaining soil health and fertility, particularly in intensive MAP cultivation.

Using compost reduces the need for fertilisers, thus decreasing production costs. It also enhances the effectiveness of animal manure, even in small quantities, when used in conjunction with it. Compost can also be used to recover degraded soils.

What is compost?

Compost is the product that results from the controlled decomposition of plant and animal (mainly manure) materials. Compared with uncontrolled decomposition of organic material, composting accelerates the process and produces a higher-quality end product. The high temperatures in the composting process kill most weeds, pests and disease-causing organisms.

One could say that mature compost is a pre-stage of humus that is ready to be incorporated into the soil and to form true humus over a short time.