

## Seminar on Composting & Humus Management

(for agriculture & related fields)

Knowledge & Hands On Experience

The Tools to Success!

6 Days

The basis to all health is 'live' humus in soils. This means we have to find a way and the means to save the humus we have, and to build up 'live' humus in soils as quickly as possible. This is our only chance, to turn around the worldwide decline of agriculture, we evoked through our inconsiderate agricultural systems. The combination of Humus Management and a Controlled Composting Process offer practical concepts and individual possibilities to efficient humus build-up within a short period of time.

Within 6 days, you will get the chance to find a completely new perspective on environment and soils and how to change the current situation. You will be able to find your own, individual solution.

The combination of lectures and hands on experience will provide you with the necessary tools to start your own composting right away, or improve your current practices. Within 6 training days you will get the **knowledge** and the background, on how to ensure a highly efficient and therefore economical composting process.

You will get the necessary **practical experience**, to apply the learned right away. You will learn to understand the mutual effect of high quality compost and humus build up.

Knowledge creates competence. Competence is the basis to independence!

**Day 1:** all day: **The basics of Humus Management**. A slide lecture provides a fundamental understanding for the mutual influence of soil, compost and environment.

Day 2: Morning: The Controlled-Composting-Process, part 1.

A slide lecture provides a fundamental understanding of composting according to **natural cycles**.

Afternoon: **Composting practice**, part 1. Building a **properly made windrow** at a composting site. **Efficient use** of composting **equipment, minimising losses**.

Day 3: Morning: The Controlled-Composting-Process, part 2.

A lecture about microlife in compost.

Topics like: • Anaerobic microorganisms antagonists to aerobic life.

- The advantages and dangers of water.
- From waste to live humus.

Afternoon: Composting practice, part 2. Operation of instruments, water application, correction of problem situations. Proper site construction.

Day 4: Morning: Laboratory work, part 1. Fast test methods to determine quality and maturity of compost.

Central theme of the day: • how to eliminate losses in composting.

• what factors make **compost** most **sustainable** in soils.

Afternoon: Laboratory work, cont.

Slide lecture on nutrient cycling in compost.

Day 5: Morning: Laboratory work part 2.

Why quality compost has a positive and lasting influence on soil and environment. Compost application and humus build-up in soils? The Luebke-Humus-Test monitors humus building, pH-value in correct interpretation.

Afternoon: **Composting practice**, part 3. Work at the site.

**Theory lecture** on Humus in composting and soils.

**Day 6:** Morning: **Slide Lecture** on compost quality and its effects on soil and environment, liquid compost extraction and circular chromatography.

**Circular Chromatography according to E Pfeiffer**: Microorganisms are the central coordination point in soils. Since it is a difficult, lengthy and expensive procedure to determine variety and total count of microorganisms, most farmers know little about the most important support factor of their soils. Chromatography, as developed for soil and compost application by Dr. E. Pfeiffer, offers an economical, fast and simple method to evaluate the microbial life of soils.

Afternoon: Interpretation of results and closing lecture.

- How barren soils can be revived, and brought back to fertile farmland.
- The mutual effect of quality-compost and soil.
- Detoxification of contaminated soils, from residual agricultural chemicals to heavy metals.
   Proper compost application
- Elimination of pathogens in soils.
  Recovery of the water balance of soils.

A close look at the **future prospects** of carbon cycling and composting in agriculture and industry.