

The Benefits of the Biodynamic Compost preparations

You might have had doubts about why you would benefit from using the biodynamic compost preparations? Or you might have been using the biodynamic compost preparations and either asked yourself, what do they really contribute to my compost, my garden or even to my health?

I will share with you in 3 posts the benefits of the biodynamic compost preparations, their best uses and benefits. I will also touch on the Mäusdorfer and Cow Pat Pit Preparation, and where it can be useful to employ it.

So let's start today with the general benefits for the compost itself.

How can we view the biodynamic compost preparations? Compare the use of healing herbs in the compost preparations with the herbs and spices we use in cooking, which serve with their vitamins, trace elements, aromas, and catalytic functions to enhance all aspects of digestive and metabolic processes and other biochemical interactions, to direct breakdown and absorption of the foods they are used with.

In the compost pile: The decomposition process is slowed down and overheating is avoided. The **gentle heat development** lasts longer in the heap. This encourages the invasion of the heap with **mycorrhiza**, which fix free ammonia; **spore forming bacteria**, which fix airborne Nitrogen; and re-population of the compost material with **Collembola** insects, which form the first stages of stable humus, which then is further elaborated by the **compost worm or wiggler**. In other words the decomposition and composition processes for the organic material, life processes and organisms in the compost pile are optimised.

Experiments and results using biodynamic compost preparations:

- Two compost boxes with identical material had a perforated wall in between them. One box had BD preps the other without. It was found that almost all the compost worms migrated to the box with preparations in (Grohne 1929 and Pfeiffer 1956).
- An increase of aerobic bacteria by 30-60 times from the amount counted at the beginning of the process (Pfeiffer 1948 & Abele 1973), this inhibits mould-forming and **anaerobic** organisms.
- Phosphorous content in biodynamic compost is 2% compared to the control heap at 0.5-2%.
- **Soil:** 10 times higher presence of Cyanocobalamin (Vit. B 12), which enhances nitrogen fixation of freely living bacteria and nodule bacteria on legumes.
- Biodynamically prepared farmyard manure compost enhances nodule formation, creates a deeper crumb structure and dissolves soil compaction (Abele 1973, Wistinghausen 1977 & Spieß 1978).

In other experiments results were as follows:

- The cation exchange capacity is enhanced (H. Heinze & E. Breda 1962). 10 months of composting of farmyard manure with BD preps showed increased levels of total

nitrogen and humus content compared to 4 other methods of composting organic materials (Fürst 1966).

- Effects of compost preps on earthworms: BD compost increased population by 120%. Artificial fertilizer diminished presence by 20% and control soil lost 40% of worms.
- A biodynamic compost retains more CO₂ (J. Bockemühl 1985).
- In an experiment conventional seeds were soaked in biodynamic compost preps. That resulted in a 20% increase in germination rate over control group (1986 University of London).
- Enrichment of compost with **Nitrogen** at the end of stage 2: 1.7 % N compared with control 0.7 % due to lower loss of Ammonia (NH₄⁺) (Koepf 1966).
- In another experiment the *Nitrogen content was raised from 1.5% to 3.73% by applying BD prep. 502 in composting process.*
- Compared to not applying this type of compost; soil with it accumulates 40% more air nitrogen for Maize.
- *Soil enriched with biodynamic compost produces more Vitamin B 12 which was highest using cow manure.*

What about Plants grown using this compost?

- They demonstrated higher resistance to frost, droughts, heavy rains, winds, pests and diseases.
- Valerian preparation used together with the Chamomile preparation or in combination with horn manure preparation increased root depth of the central root.
- Oakbark preparation increases the feeder roots (horizontal roots) making more nutrients available and producing more contact with the microbiome of soil (Goldstein 1979).
- Soil enriched with biodynamic compost had plants with larger root development and the legumes showed 16.2 g nodule bacteria in 100 legumes compared to 9.5g in the control group (Pfeiffer 1956).

Who would have thought there are so many differences between organic and biodynamic compost? The other aspect is about how well the micro- and macro-organisms in the compost and in the soil responded to the biodynamic compost preparations.

Next time more about the other benefits

Happy composting

Hans-Günther

BIODYNAMIC PREPARATIONS

healing the earth



