



Palaterra®
The Green Deal

This is the green revolution!

What is Palaterra®?

We solved the puzzle: by extensive, application-oriented research, the formula for Terra Preta do Indio could be retraced; the manufacturing technique has been patented. We are now able to produce a black soil which is not only genetically identical to Terra Preta do Indio, but even surpassing it in its positive attributes.

Palaterra® – the new Terra Preta

Palaterra® 1 is an eutrophic humus substratum, in which all nutrients are firmly bound, effectively preventing loss from washing out. Biochemical mechanisms allow for nutrients to be provided exactly tailored to the needs of the plants, granting optimal supply. This is achieved by means of excellent physiochemical properties on the one hand, as well as via exceedingly well-balanced populations of micro-organisms and soil fungi on the other, which complement one another in their effect.

As soil additive, *Palaterra® 2* has excellent soil-forming properties such as, e.g., effective and active build-up of permanent humus. For instance, if soil used for horticultural or agricultural purposes is enriched with the new additive, the positive properties can be transferred to the treated soil. Thus treated, the soil maintains its efficacy, its ability to keep nutrients and the cultivation of humus, for many years.

Further positive effects of the new *Palaterra®* culture media and *Palaterra®* soil additives are a high water storage capacity and good aeration, properties which decisively codetermine the quality and productivity of culture media and soils.

Our organic fertilizer, *Palaterra® 3*, completes the long-term effects of *Palaterra® 1* and *Palaterra® 2*. *Palaterra® 3* can rebuild nutrients in potted and in agricultural soil that has been washed out by many years' use. It can also be used as fertilizer without prior use of *Palaterra® 1* and *Palaterra® 2*.

Top soil. For our environment

With its wide variety of applications, Palaterra® is an excellent product for effective use of natural resources and for a positive ecological balance in cultivating land (reduction of linear erosion of nutrients/minerals, improvement of soil conditions and boosting of a healthy growth etc.). Even better, Palaterra® has the potential for an effective restoration of degraded soil. Our black soil is the key ingredient for a steady humus production, and will increase retention of nutrients and water. It reduces soil erosion and even promotes the recultivation of arid, desert land.

Palaterra® will provide permanent relief for a variety of problems stemming from climate and soil conditions. It will help to spread the movement of sustainable agriculture and be an easy means for complex issues such as climate protection, productivity of land and natural resources, efficiency and biodiversity, local added value and waste recycling.

Palaterra®: Top soil for the earth

Palaterra® humus substrate and soil conditioner are suitable for commercial agriculture and horticulture as well as private gardening.

Palaterra® provides comprehensive improvement of soil for agriculture, forestry and horticulture.

Palaterra® increases areal productivity whilst protecting the resources (higher production output of food and biomass = fighting hunger and producing energy).

Palaterra® is the perfect basis for an ecological production of food (reduction or substitution of the use of mineral fertiliser, sound growth, strong plants = less use of chemicals!).

Palaterra® prevents the dehydration of whole areas (reduction of desertification and soil degradation).

Palaterra® provides comprehensive erosion control (prevention of material loss in the area).

Palaterra® prevents flooding by means of its high water storage capacity.

Palaterra® allows the build-up of small hydrological cycles and improves local water households (soil as a water reservoir = resourceful treatment of water and climate)

Palaterra® protects the climate by means of binding CO₂ into soils (globally, 9.5 gigatons of carbon per year are possible!) reducing methane and nitrous oxide in agriculture and by providing efficient, resource-saving and sustainable land use systems.

Palaterra® protects marshes by providing a high-quality alternative to peat, which is also produced in decentralized plants.

Palaterra® offers a sensible recycling of organic biomass and waste, which are often hard to dispose.

Palaterra® reduces expenditures in public waste disposal.

Palaterra® helps to create regional value creation chains and economic circuits.

Top soil helps the earth breathe.

The humus layer has a key function in the carbon cycle. About 4/5 of active carbon involved in the biosphere's carbon cycle are bound in the earth, the largest part in top soil or the humus layer. Intense agricultural use and progressing soil erosion as well as a temperature rise due to climate change in large parts of the planet result in reducing the humus layer. This means a drastic accumulation of carbon dioxide in the atmosphere.

Palaterra® – the carbon sink

Treating soil with Palaterra® results in a marked reduction of our atmosphere's carbon dioxide level. If this carbon sequestration were comprehensively applied, it would mean a great step towards saving our climate! Under specific conditions, one hectare agricultural soil can bind 250 Mg carbon, long-term. Sinking carbon in agriculturally used soil, combined with Palaterra®- technology: this results in a noticeable improvement of soil conditions and an increase in productivity; the farmer gains considerable profit.



Palaterra® from a pilot plant, Environmental Technology Day 2008, University Birkenfeld



Harvesting of radish in Palaterra® garden, summer 2009, Hengstbacherhof

Top soil. For agriculture.

Palaterra® culture media, soil conditioner and organic fertilizer are suitable for commercial agriculture and horticulture as well as private gardening. Our products will be on sale in spring 2011.

Palaterra® improves the soil's productivity, for commercial agriculture and horticulture.

Palaterra® boosts a healthy growth.

Palaterra® reduces the need for additional irrigation.

Palaterra® reduces the need for fertilizer by approx. 80%.

Palaterra® prolongs the length of land utilization.

Palaterra® revives poor, degraded soil.

Palaterra® is easy to handle and to apply.

Nominated for

