



about *ekolive*

ekolive is the first and leading provider of a new ecological bioleaching method for the removal or extraction of metals from minerals (**bioleaching**), in situ cleaning of contaminated sites and ex situ cleaning of contaminated soils and minerals (**bioremediation**), as well for the production of ecological soil additives and plant strengtheners (**biostimulants**), also to increase the effectiveness of phytosanitation.

Our technology is certified by the European Commission.



ekolive is ecological, innovative, value-adding; the breadth and contribution of our innovative technology to achieving global sustainability goals is extraordinary.



How to apply

ekofertile™ plant is applied on plants by spraying or irrigation.

For watering during the growth phase of the plants, we recommend at least three applications at intervals of no more than 14 days and then, if necessary, with each subsequent watering.

To do this, dilute the product with water to 1–3 % (i.e. 1–3 litres of *ekofertile™ plant* in 100 litres of water).

As a general rule to increase potency/fertility, apply *ekofertile™ plant* multiple times (ideally with each watering), but not necessarily increase the concentration.

When sowing and in the early leaf stage, use a maximum concentration of 1% (i.e. 1 litre in 100 litres of water). Significantly higher concentrations can also be used to revitalize ailing shrubs and trees and to boost the fructose content shortly before harvest.

Best for trees, flowers, strawberries, potatoes, barley, wheat, carrots...

Use approximately 100 kg of *ekofertile™ soil* per hectare for soil conditioning; incorporation into the topsoil. Single application before sowing.

Storage: Store *ekofertile™ plant* and *ekofertile™ soil* in the original closed containers in a dark place and at a temperature between 10 and 25°C if possible. Protect it from frost, fire and direct sunlight.

Shelf life: When stored in the undamaged original packaging and if the storage conditions are observed, 6 months from the date of manufacture.

Pack sizes: 1, 2, 5, 10, 25, 50, 1.000 litre containers.

Producers

Victory Organics d.o.o.

Lipovac 1 | 1208 Petrijevci | Croatia

E-Mail: info@victory-organics.com

Internet: <https://victory-organics.com>



Clevergarten24.de

Inh. C. Werner

Untereichen 13 | 33129 Delbrück | Germany

E-Mail: frage@clevergarten24.de

Internet: <https://clevergarten24.de>



Bioleaching | Bioremediation | Biostimulants

ekolive Germany GmbH

Humperdinckweg 12

33102 Paderborn | Germany

E-Mail: ekolive@ekolive.eu

Internet: <https://ekolive.eu>



ekofertile™

Microbial Biostimulants

for application on leaves and soil



Benefits

ekofertile™ plant is a natural biostimulant (organic-mineral NK fertilizer) for the biological strengthening of ornamental and crop plants – **ekofertile™ soil** (soil additive) primarily serves to promote or restore the microbiome in the soil – and thus in turn to strengthen health, the resistance and the growth of the plants. Both of them

- ✓ increase root growth and mass and fine roots;
- ✓ improve food and phosphate absorption;
- ✓ stimulate plant growth;
- ✓ revitalise the microbial life in the soil and increase humus production;
- ✓ improve the water storage capacity of the soil;
- ✓ shorten the growing season;
- ✓ increase yield as well as plant and crop quality;
- ✓ increase nutrients and sugar content;
- ✓ increase health, resistance, immunity against pathogens;
- ✓ increase efficiency and reduce the need for fertilizers;
- ✓ act against abiotic stress;
- ✓ increase seed germination rate and radicle development.

ekofertile™ soil and **ekofertile™ plant** are labeled in accordance with the German Fertilizer Ordinance and are included in the FiBL list of inputs for organic farming in the Netherlands.



The effects have been tested and proven by the Biorenewables Development Centre.



A biological tool

ekolive uses naturally occurring heterotrophic microorganisms as a biological tool. Our biostimulants for soil and plants produced in this way offer a unique combination of microorganisms, organic acids and dissolved micronutrients. They ensure increased root growth, thus more fine roots, and thus better phosphate absorption. Amino acids – in combination with trace elements – stimulate plant growth.

“Biostimulants for soil and plants from ekolive support ecological transformation.”

Microbial soil and plant stimulants

Our **ekofertile™** biostimulants are produced by bioleaching of sand – (pH approx. 4.5) with natural probiotic bacteria such as *Lactobacillus*, *Bifidobacterium* and *Lactococcus*. These are plant growth-promoting microorganisms that activate soil life – which in turn accelerates the conversion of organic matter for increased humus production, shortens the growing season, improves soil conditions for more root mass, increases yield through improved nutrient availability, and improves nutrient and soil conditions for better crop quality.

Microorganisms in the root microbiome expand the plant immune system, even increase growth, and thus play an important role in the plant ecosystem.

Today, the need for biostimulants is greater than ever – for various reasons, not to mention the skyrocketing prices for artificial fertilizers. On the one hand, new and restrictive fertilizer regulations are increasing the pressure on farmers. Despite stricter regulations, they still want to harvest high yields and good quality. On the other hand, well-known active ingredients also fail due to resistance.

The targeted use of effective biostimulants can compensate for the usual drop in yield during a transformation from conventional to organic farming.

ekofertile™ soil

In the soil, our biostimulants strengthen or even rehabilitate the microbiome. While conventional liquid strengthening agents can only be applied to a limited extent in the root zone, **ekofertile™ soil** is mixed into the topsoil and becomes part of the root zone. The organic acids and humic acids contained are very stable and form clay-humus complexes in the soil, which bind water and nutrients. They act against abiotic stress such as water shortage.

The probiotic lactic acid bacteria contained in **ekofertile™ soil** improve the soil, strengthen their immune system and defences against abiotic stresses and potential diseases and promote plant growth.

The use of **ekofertile™ soil** helps to sustainably maintain the functionality and performance of the soil with reduced use of pesticides and fertilizers. By using it, significant amounts of fertilizers can be saved and at the same time biodiversity and the soil can be protected in the long term.

ekofertile™ plant

Our liquid biostimulants contain living, growth-promoting microorganisms (PGPM), various organic acids produced by the microorganisms (lactic acid, butyric acid, acetic acid, amino acids, methanol and ethanol) as well as trace elements (dissolved Fe-Mn oxides and hydroxides, mica and feldspar), which are applied to the leaf surfaces of crop plants or to the soil. The PGPM specifically colonize the root area and the inside of the plant and increase the health, resistance and growth of the plants.

The microorganisms contained in **ekofertile™ plant** directly influence plant growth. They also buffer the effects of biotic (fungi, bacteria, viruses and insects) and abiotic stress factors (heavy metal levels, periods of drought, lack of nutrients, high salt levels and extreme temperatures). They produce the plant's own hormones, which act as messenger substances and thus control and coordinate both growth and development.

The microorganisms produce metabolites that are said to have an antifungal, antibacterial, antiviral or phytotoxic effect. In addition, pathogens are pushed back within the rhizosphere simply because of increased competition from the mere presence of the PGPM.

ekofertile™ plant can also be used to boost the effect of conventional mineral fertilizers, as the nutrients are made more readily available to plants. In this way, the reduced use of fertilizers can be compensated.