

penergetic
SoilPLUS®



Soil Improver

for active and fertile soils



Penergetic SoilPLUS® ensures active microbiology, improved soil structure and ideal water balance.

Counteracts compaction stress and promotes root development for long-term secure yields.

Enhances microbiological activity in the soil and therefor improve processes in the soil.

penergetic 
the natural biotechnology

How is your soil doing?

Certified quality according to EU standards



A healthy soil is a fertile soil

Penergetic has developed SoilPLUS® to improve soil. The product stimulates existing soil life, creating ideal conditions for plants.

This is a crucial growth factor to enhance your plant productivity.

What is a CE-certified product?

A CE-certified product meets all legal requirements for safety, quality, traceability, and conformity for its product category as specified by the EU. This means that our product has been tested, proven, and documented, thereby enabling the product to be marketed throughout the EU with legal certainty.



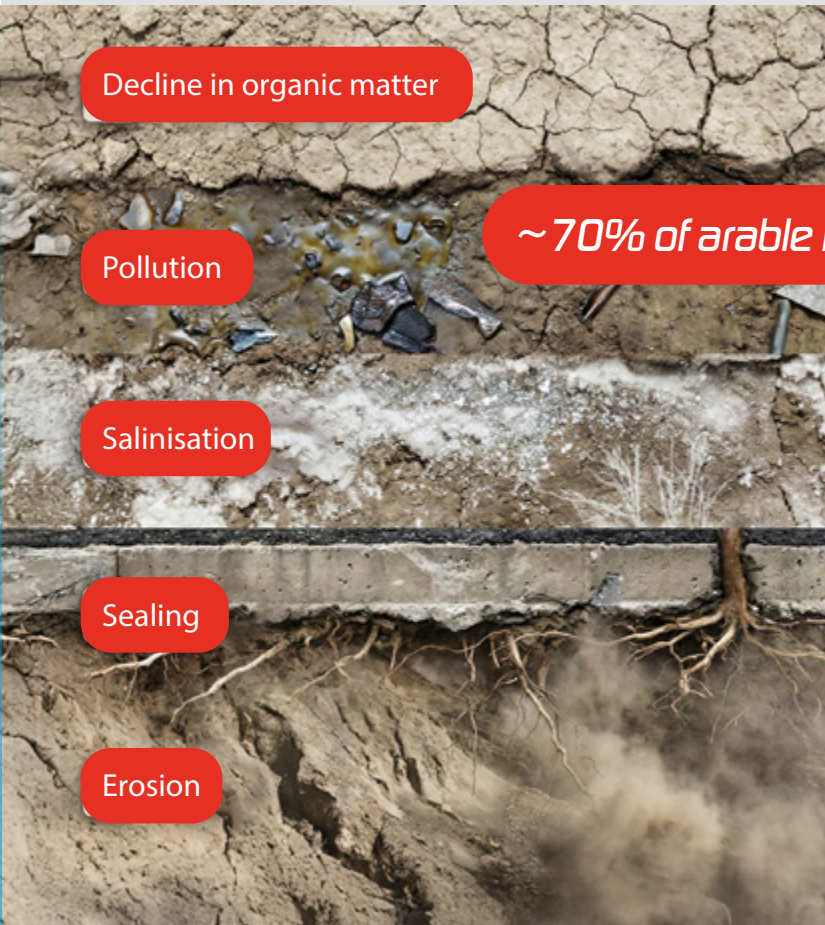
Damaged and declining soil

Despite their central role ~70% of EU soils are damaged!

Soils form the basis for 95% of food production and are home to more than 25% of global biodiversity.

Leading cause of soil damage:

In Europe, around 1 billion tonnes of soil are lost annually through erosion. Decline in organic matter, pollution, salinisation and sealing.



~70% of arable land is damaged



Microorganisms accounts for less than 1% of the soil volume.

But they are responsible for: Soil aggregation, water retention, plant adaptability and plant nutrition via solubilisation.

Active rhizosphere promotes nutrient uptake

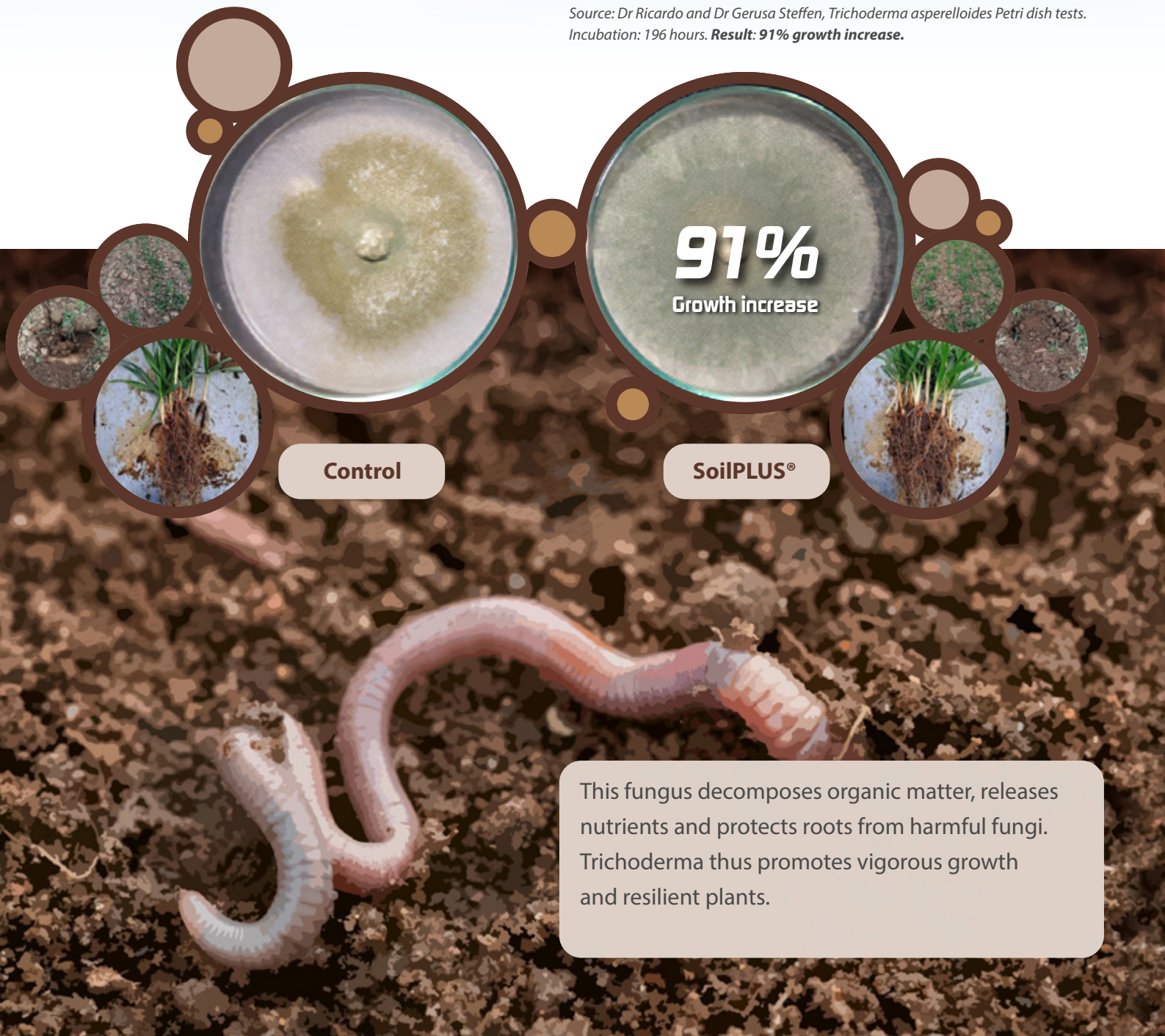


SoilPLUS® has a direct effect on beneficial micro-organisms such as decomposing fungi (Trichoderma) and bacteria, which convert plant residues into humified compounds. This increases rhizosphere activity and enhances nutrient uptake.

Trichoderma growth tests

The laboratory results show a significant increase in Trichoderma growth demonstrate how vital penergetic SoilPLUS® is for your soil.

Source: Dr Ricardo and Dr Gerusa Steffen, Trichoderma asperelloides Petri dish tests. Incubation: 196 hours. Result: 91% growth increase.



This fungus decomposes organic matter, releases nutrients and protects roots from harmful fungi. Trichoderma thus promotes vigorous growth and resilient plants.

The power of healthy soil



Control

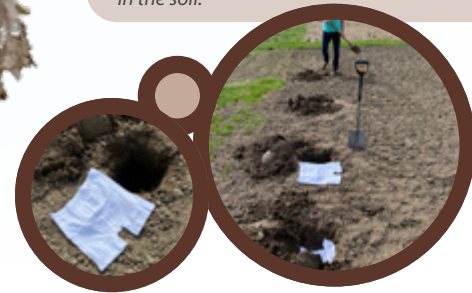


SoilPLUS®

Decomposition test:

Underpants (100% cotton) have been buried in the soil for 60 days.

The control pants (left) indicate some activity and breakdown. The SoilPLUS® pants (right) show barely recognisable underpants, due to the increased bacterial activity in the soil.



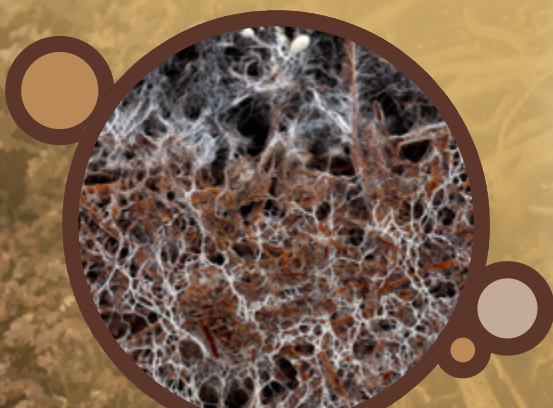
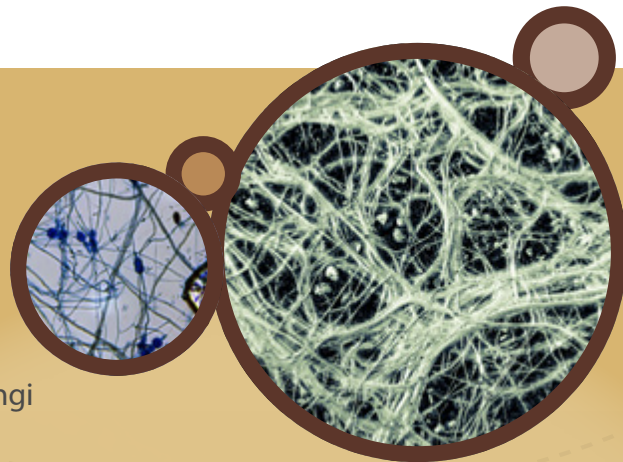
The test is simple, the results impressive

The underpants serve as an indicator of soil activity in the experiment. The faster the cotton decomposes, the more organisms are at work; therefore, the soil is more active and healthier. Proof of how penergetic SoilPLUS® promotes healthy microbiology.

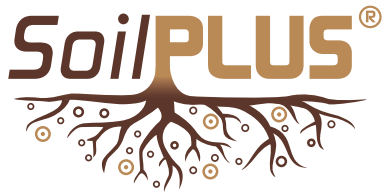
penergetic SoilPLUS® improves nutrient uptake

SoilPLUS® strengthens the soil's resistance to stress factors, such as drought or salinisation, and improves its structure and long-term fertility.

- Enhancing the growth of mycorrhizal and Trichoderma fungi
- Promotes symbiosis between plants and microorganisms
- Better soil aggregation and soil structure
- Optimises nutrient availability
- Enhances microbial biomass
- Increases plant yield







Application & Dosage

The recommended dosage should be adjusted to suit individual soil conditions:

- SoilPLUS® is a soil application (liquid or solid)
- Can be used alone or mixed (in combination) with other products, e.g. fertilisers, herbicides, biological products...

Perennial Crops:

Application min. 30 days before Penegetic plant application.

Annual Crops:

Application min. 15 days before seeding.

	Year	Good Soils	Medium Soils	Low-Value-Soils
Sandy Soil		high yields	average yields	low yields
	First	3 kg / ha	3 kg / ha	3 kg / ha
	Second	2.5 kg / ha	2.5 kg / ha	2.5 kg / ha
	Third	2 kg / ha	2 kg / ha	2 kg / ha
Silty Soil	Subsequent	1.5 kg / ha	1.75 kg / ha	1.75 kg / ha
	First	2.25 kg / ha	2.5 kg / ha	2.5 kg / ha
	Second	2 kg / ha	2.25 kg / ha	2.25 kg / ha
	Third	1.75 kg / ha	2 kg / ha	2 kg / ha
Clay Soil	Subsequent	1.25 kg / ha	1.5 kg / ha	1.5 kg / ha
	First	2.25 kg / ha ¹⁾	2.5 kg / ha	2.75 kg / ha ²⁾
	Second	2 kg / ha ¹⁾	2.25 kg / ha	2.5 kg / ha ²⁾
	Third	1.75 kg / ha ¹⁾	2 kg / ha	2.25 kg / ha ²⁾
Loamy Soil	Subsequent	1.25 kg / ha ¹⁾	1.5 kg / ha	1.75 kg / ha ²⁾
	First	2 kg / ha	2.5 kg / ha	2.5 kg / ha
	Second	2 kg / ha	2.5 kg / ha	2.5 kg / ha
	Third	1.75 kg / ha	2.25 kg / ha	2 kg / ha
	Subsequent	1 kg / ha	1.5 kg / ha	1.5 kg / ha

¹⁾ if well drained ²⁾ in case of waterlogging



Solid

Quartz Powder

Bag 8 kg
Bag 20 kg



Liquid

Molasses

Canister 10 L
IBC tote 600 L





With the impulse of nature.

Penergetic International AG is a Swiss company offering new solutions for sustainable and profitable agriculture on a global scale.

As a family-owned business we are committed to the responsible use of agricultural land and the careful use of resources for over 25 years.

The Penergetic product range for soil, plants, animals, compost, manure and water is based on biostimulation technology and considers the natural process chains in agriculture and the environment.

Penergetic International AG
Romiszelgstr. 1 | CH-8590 Romanshorn
Phone +41 71 466 60 20 | info@penergetic.com
www.penergetic.com