



# Biostimulants

*for Broadacre Crops*



Penergetic FieldSTIM® boosts your crops to be more stress resistant and productive. With 100% natural ingredients, CE-certified, our non-microbiological biostimulant has been tested, verified and specially designed for broadacre crops.

***Supports leaf regeneration  
and strengthens resistance  
to abiotic stress in broadacre crops.***

**penergetic**

the natural biotechnology

# What are biostimulants?

## An extract from the EU regulatory:

### What is the biostimulant regulation?

The Biostimulant Regulation is part of the EU Fertiliser Regulation (EU) 2019/1009), which sets uniform requirements for biological plant strengtheners throughout the EU. It defines which efficacy claims may be made, which safety and quality requirements apply, and how products must be tested and verified to be legally marketed as EU biostimulants.

### What is a CE-certified biostimulant product?

A CE-certified product meets all legal requirements for safety, quality, traceability, and conformity for its product category as specified by the EU. For biostimulants, this also means that the stated effects have been tested, proven, and documented in accordance with Regulation (EU) 2019/1009, thereby enabling the product to be marketed throughout the EU with legal certainty.

### Biostimulants are helpful for:

This means that nutrients in the soil area directly influenced by the plant roots are converted into a form that plants can more easily absorb. This demonstrably increases the amount of nutrients available to plants.

**Improvement of nutrient availability in soil or rhizosphere:**

The characteristics of the crop, such as colour, size, taste, shelf life, or nutritional value, are positively influenced. This is achieved through targeted support of development or ripening processes.

**Improvement of qualitative characteristics of plants or crop products:**

Plants can use the nutrients they absorb more effectively for growth and metabolic processes. This results in measurable increases in biomass or yield per amount of nutrients absorbed.

**Improved nutrient use efficiency:**

The plants' resistance to environmental influences such as drought, heat, cold, or salt stress is increased. Under such conditions, the plants show reduced impairment of developmental performance.

**Improved tolerance to abiotic stress:**

### Biostimulants can reduce nutrient losses and improve their use within plants.

Penergetic FieldSTIM® is aiming to protect your crop performance. Our biostimulant is enhancing the plant's own physiological processes and their interaction with the environment, to ensure their health by increasing their resistance to abiotic stress resulting in a more resilient plant and an enhanced crop performance.

### The result?

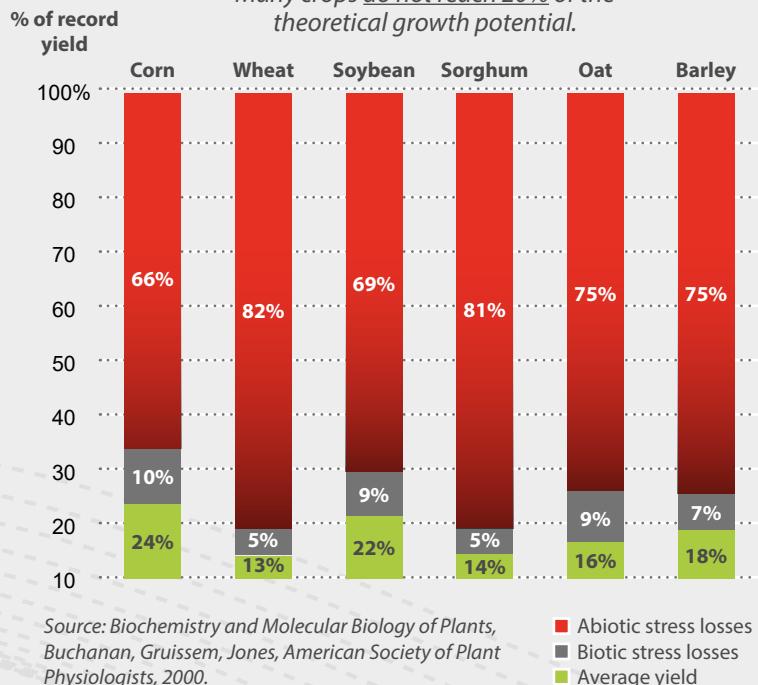
FieldSTIM® is more than a stress reducer it is a proactive crop management tool.



# ~70% of yield losses are caused by abiotic stress



Many crops do not reach 20% of the theoretical growth potential.



It is the **single most factor** for limiting the full potential of arable crops, accounting for more than half of total yield losses globally.

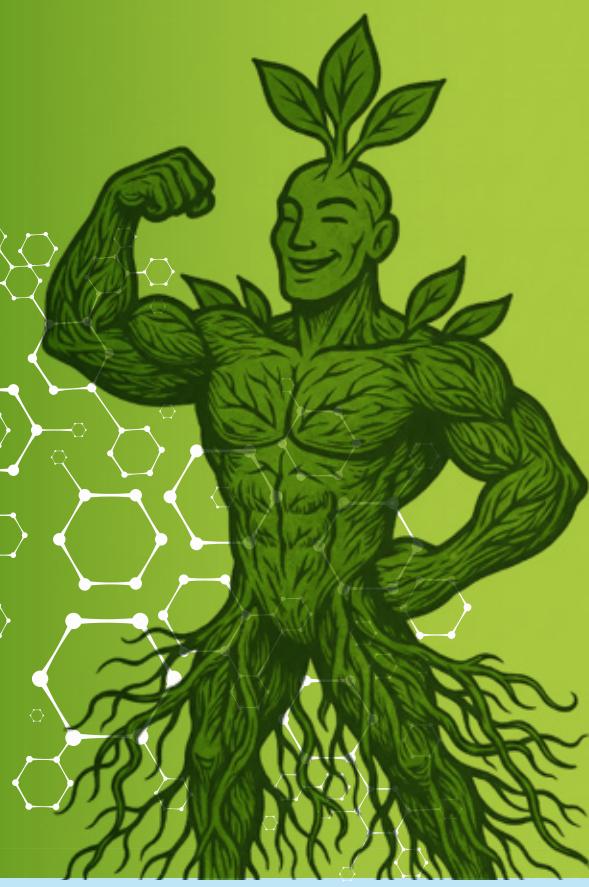
Phenomena such as drought, extreme heat or cold, excess salinity, soil mineral deficiencies, and soil toxicity are among the most impactful environmental stresses for crops and have severe economic repercussions for farmers' incomes and constitute a significant limitation to agricultural production.

## FieldSTIM® combats abiotic stress

By reducing the effects of abiotic stress, a massive increase in yield potential is possible. penergetic FieldSTIM® helps plants withstand abiotic stresses such as drought, excessive rainfall, heat, and cold by stimulating natural physiological processes.

The product improves photosynthesis, nutrient transport, and root development. This strengthens stress tolerance, ensuring stable growth and yield even under extreme weather conditions.

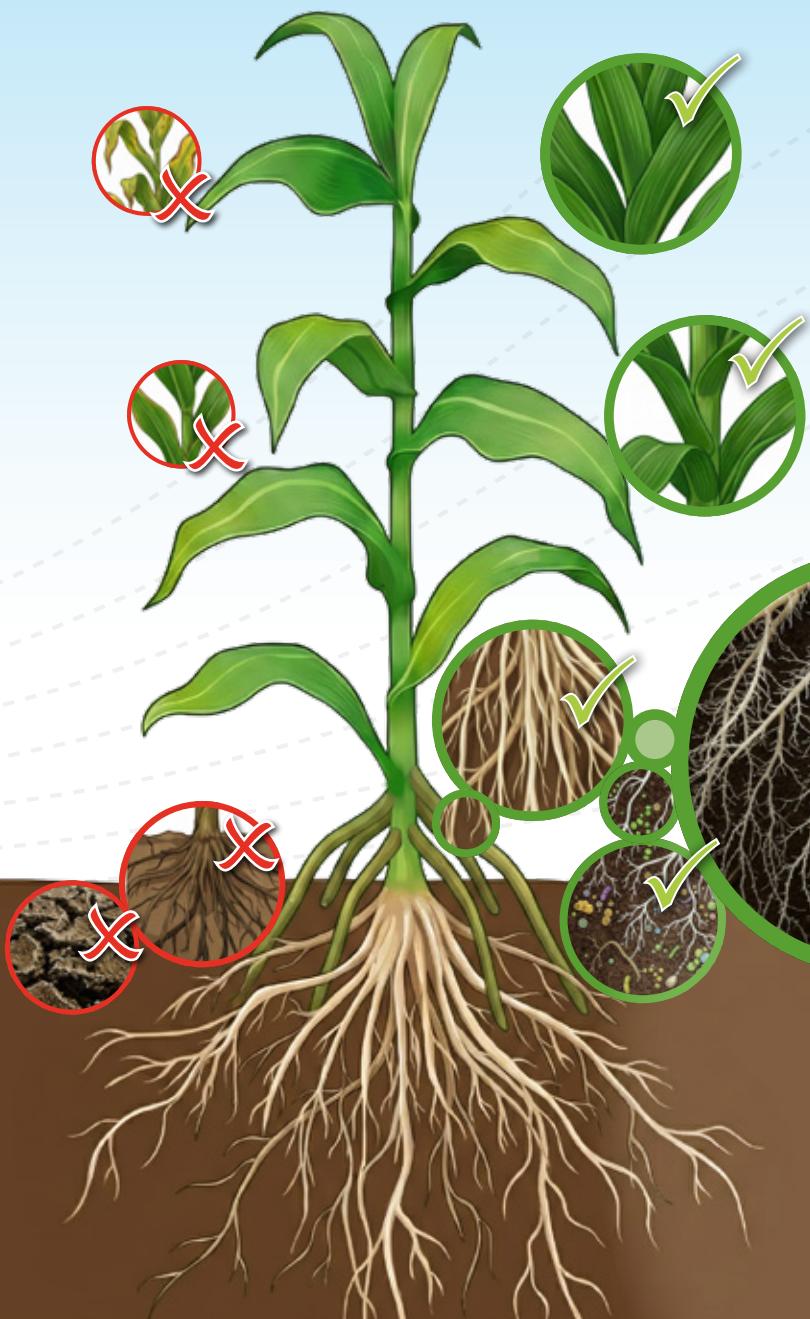




# FieldSTIM® is enhancing your crop's potential

FieldSTIM® supports leaf regeneration and strengthens resistance to abiotic stress.

You cannot control the weather, but you can control how the plants defend themselves. Biostimulants enable plants to achieve higher yields in environments with suboptimal conditions. Therefore, ensuring that the plant can continue to absorb, convert, and distribute nutrients effectively.



## Strengthen your resistance

The Penergetic biotechnology enables plants to reach their potential by helping with:

- Root growth
- Stress resistance
- Plant growth
- Photosynthesis
- Fruit set & size

## Supports root development

Promotes longer, finer roots with more branching nodes. These enhanced roots penetrate deeper soil layers, improving access to water and nutrients even under drought or excess moisture conditions.



**FieldSTIM®**



# FieldSTIM® Application & Dosage

FieldSTIM® must be applied on the correct plant phenological stage, because biostimulants act on plant responses. Our In-Crop (foliar) liquid and solid solution can be applied on its own or in combination with other applications (e.g. fertiliser, herbicides, biological ingredients, etc.). Thanks to Penergetic's many years of experience, a specific application has been developed for each crop. To apply the product at the correct stage means to obtain better growth results.



Plant/Crop/Culture	Timing according to BBCH plan (Rate / ha)			
<b>Beet</b> <i>Beet, Sugar Beet</i>	BBCH 16-19 <b>600 g</b>		BBCH 39 <b>250 g</b>	
<b>Cereals</b> <i>Barley, Buckwheat, Durum Wheat, Oat, Quinoa, Rye, Spelt, Triticale, Wheat</i>	BBCH 19-20 <b>600 g</b>		BBCH 41 <b>250 g</b>	
<b>Cotton</b>	BBCH 13-15 <b>250 g</b>	BBCH 51 <b>250 g</b>	BBCH 61 <b>250 g</b>	BBCH 71 <b>250 g</b>
<b>Legumes</b> <i>Bean, Chickpea, Clover, Lentil, Lupin, Pea, Soybean, Vetch</i>	BBCH 10-12 <b>500 g</b>		BBCH 51 <b>200 g</b>	
<b>Lucerne (Alfalfa), Grass (Pasture)</b>	30 days after SoilPLUS® application <b>300 g</b>		After 1 <sup>st</sup> cut <b>300 g</b>	After each 2 <sup>nd</sup> cut <b>300 g</b>
<b>Maize Crops</b> <i>Maize, Rice, Sorghum, Sweetcorn</i>	BBCH 13-15 <b>600 g</b>			
<b>Oilseed</b> <i>Borage, Evening Primrose, Hemp, Linseed, Mustard, Poppy, Rape, Safflower, Sesam, Sunflower</i>	BBCH 13-15 <b>600 g</b>		BBCH 20-30 <b>250 g</b>	
<b>Potato</b> <i>Potato, Sweet Potato</i>	BBCH 11-15 <b>400 g</b>	BBCH 40-50 <b>400 g</b>	BBCH 70 <b>400 g</b>	
<b>Sugar Cane</b>	BBCH 20-25, 45-60 days after planting <b>600 g</b>		6 months after planting <b>600 g</b>	
<b>Tabacco</b>	BBCH 12-14 <b>350 g</b>	BBCH 30 <b>350 g</b>	BBCH 40 <b>350 g</b>	
<b>Turf (Lawn)</b>	30 days after SoilPLUS® application <b>250 g</b>		Every 30 days <b>150 g</b>	

For liquid application convert grams to millilitres (g = mL, the dosage remains the same).

## Solid

### Quartz Powder

Bag 8 kg  
Bag 20 kg



## Liquid

### Molasses

Canister 10 L  
IBC 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, manure and water is based on biostimulation technology and considers the natural process chains in agriculture and the environment.