

KEEPING YOU INFORMED

Soil Audit and Nutrient Management

ActiV8-Bio

ActiV8-Bio is a biological starter product engineered to suit a wide range of crops.

Its principle, is to stimulate vigorous rooting, whilst aiding healthy plant growth and optimising nutrient cycling; at the same time, encouraging favourable growing conditions in the plant's rhizosphere (root zone), and regulating soil pathogens. The aim being to reduce reliance on conventional (chemical) inputs. ActiV8-Bio has been designed to make the most of a seed's potential, providing the necessary tools for the crop to flourish.

We incorporate our high-quality vermicast extract, bringing the many gains a worm affords to this easy-to-apply liquid. This biological soil feeder promotes both microbial and fungal activity, initiating optimum communications between the crop and its surrounding biology. This readily available source of food establishes a self-supporting ecosystem that won't deplete existing soil resources, making ActiV8-Bio the perfect biological starter for your crop. What if we told you, there is a microbe that could improve a crop's frost resistance; or that Fusarium - amongst others, could be controlled by bacteria? Imagine having an army of workers all helping to release locked-up nutrients; improving conditions for water and air biology to move properly without hindrance.

ActiV8-Bio contains a range of efficient microbes, each of which has been selected for its specific traits, such as to stimulate soil Phosphate release - important for crop energy and rooting, or the de-toxifying of organic contaminants via bio-remediation (using living organisms to remove contaminants, pollutants, or unwanted substances from soil or water), leading to healthier, cleaner water and soils. Microbes secrete enzymes that breakdown complex organic compounds into simpler forms, contributing to the breakdown of organic matter and glue-type substances that act as binding agents, helping to form stable aggregates.

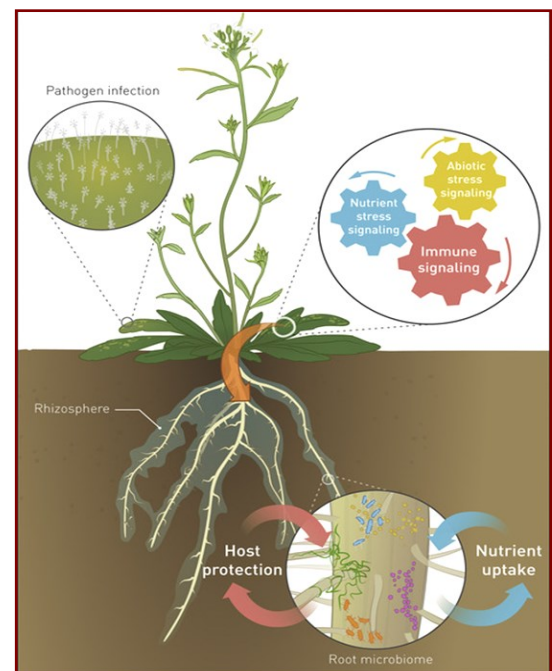
Endophytic bacteria (such as those in ActiV8-Bio), are microbes that live within the tissues of plants. They have a symbiotic relationship with the host plant and offer several benefits: production of plant-growth promoting substances such - auxins, cytokinin's, and gibberellins, which stimulate plant growth and development. Some also 'fix' atmospheric Nitrogen and convert it to forms that plants can utilise, thus providing an additional source of Nitrogen for the host plant. Bacteria can produce anti-microbial compounds that can outcompete pathogens for space and resources, as well as suppressing them, so reducing disease incidence and severity.

Some endophytic bacteria also induce systemic resistance in plants, activating their defence mechanisms and making them more resistant to diseases.

Improved stress tolerance:

The same bacteria can also help plants cope with various environmental stresses such as drought, salinity, temperature extremes, and heavy metal toxicity. They produce stress-responsive enzymes, Osmo protectants and antioxidants, that protect plants from damage and enhance their stress tolerance. These bacteria can also regulate plant/water balance and hormone levels, improving plant survival under adverse conditions.

Yield potential is often determined within 30-45 days from germination, which is why ActiV8-Bio is much more than an NPK fertiliser, so, to encourage stronger rooting and healthier biological processes ActiV8-Bio also includes trace elements - small in amounts but mighty in their importance. Cobalt, Zinc and Boron all play their part in early development, without which the all-important metabolic pathways would be missing vital links in their processes, with these supporting components in place, the infrastructure and the fledgling crop is better prepared to flourish.



Every journey begins with a single step and ActiV8-Bio is the biological starter of choice when you want to set up your soil and crop for the challenging times ahead.

The future lies in

BIO-LOGICAL FARMING SOLUTIONS