

Vitabac®

As standard or 5x super concentrate



Rhizobacteria (PGPR)

Increased root growth, higher rates of nitrogen and an improved supply with phosphorus

Vitabac® is a bacterial soil and root inoculant for all plant species. The product is of a powdery texture and available as a standard or a five times concentrated blend. The bacteria colonize the root surface and the immediate adjacent area, the so-called "rhizosphere". These already quite well researched "rhizobacteria" are well known as "plant growth promoting rhizobacteria"(PGPR) in English literature because of their growth promoting effect on plants. The bacteria fix atmospheric nitrogen in the soil and solubilize bound phosphates, to make them available to plants. They also produce plant growth hormones that stimulate root growth (Gibberellins and Cytokinins). The plants develop stronger roots and more nutrients become available. This leads to an increased stress tolerance, uniform growth with less fertilizer use and better crops.

	Improves	Reduces
Benefits:	Root growth • Nitrogen and phosphorus uptake • Yield and production	Uneven growth • Susceptibility • Use of fertilizers

Compatibility: The products may be combined with fertilizers. The bacteria should be protected against ultraviolet radiation or other influences with a bactericidal effect.

Application: Apply at least 250g **Vitabac®** per hectare. Use 50g **Vitabac® 5x** per hectare in special situations when only small quantities can be used. **Vitabac®** can be mixed with water and sprayed or applied through the irrigation system. Do not expose the microorganisms to ultraviolet radiation and make sure to use enough water to drain **Vitabac®** into the soil. If it applies to the production system, several applications with smaller quantities are preferable. **Vitabac®** is the ideal product for inoculation of plants that do not form mycorrhizae, such as the crucifers (rapeseed, cabbage and broccoli) or sugar beet. For these cultures, the root growth needs to be stimulated with a particularly high concentration of bacteria, in order to achieve the effects that are usually gained with our endomycorrhizal products: higher resistance and yield even under adverse conditions. For more information about the suitability, dosage and timing of application, please contact our technical assistance.

Storage: Store in a cool, dry place. Avoid high temperatures and direct sunlight. Product shelf life is up to 18 months.

Ingredients:	Beneficial bacteria (PGPR): nitrogen fixation, release of phosphorus, production of plant growth hormones	<i>Azospirillum brasilense, Azotobacter chroococcum, Bacillus subtilis, B. megaterium, Pseudomonas fluorescens</i> 5,000,000,000 CFU/g (5x10 ⁹ CFU/g) CFU = Colony Forming Units
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