

Bactiva® ZS 1/3x

SMALL DETAIL BIG DIFFERENCE



Rhizobacteria (PGPR) and Trichoderma

Strengthens all cultures starting at the roots in a biological way

Bactiva® ZS 1/3x is a culture substrate in granulated form, which strengthens the plant root and enhances the resistance. The product contains a highly potent strain of *Bacillus subtilis* and several species of the beneficial fungus *Trichoderma*, which strengthen plants in a natural way. **Bactiva® ZS 1/3x** is a rooting agent that stimulates the growth of roots through bacteria that produce plant hormones (Gibberellin, Cytokinin), such as *Bacillus megaterium* and *Pseudomonas fluorescens*. The bacteria and *Trichoderma* stimulate strong root growth throughout the entire growing period. In addition, they are indispensable tools during the plant germination phase or during the restoration of damaged roots. The bacteria fix nitrogen and make chemically inaccessible phosphorus soluble. Thereby they provide elements, which plants cannot take up otherwise. Biostimulants excite the biological activity of the soil. In association with the microbial ingredients, they enhance the level of cell division and lateral bud development, whereas the aging process of plant tissues is delayed.

Benefits:

Increases

Transplant survival • Nutrient availability • Root mass • Flowering and color (flowers) • Cell division • Harvest and production • Water and nutrient uptake • Respiration and photosynthesis • Lateral bud development • Plant performance under stress

Reduces

Loss of plants • Damage due to frost • Use of chemical fertilizers and fungicides

Compatibilities:

This product is compatible with the majority of fungicides if mixed together only briefly. However, avoid the use of biocides like hydrogen peroxide and chlorine during application. In general, **Bactiva® ZS 1/3x** is compatible with fertilizers. **Copper:** According to the present state of knowledge **Bactiva® ZS 1/3x** is compatible with copper concentrations commonly used in the root zone. Though gram-negative bacteria like *Pseudomonas* fall out at these concentrations, *Trichoderma* and gram-positive bacteria (*Bacillus*) are generally compatible.

Application:

Bactiva® ZS 1/3x is for mixing into substrate. The finished mixture should not be stored for too long. Please note: Substrates meant for mushroom growing should not be inoculated with our product.

Application: 100-200g/m³ substrate

For further information about applicability or dosage we advise to consult 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: nitrogen fixation, solubilization of phosphorus, production of plant growth hormones	<i>Bacillus subtilis</i> , <i>B. polymyxa</i> , <i>B. megaterium</i> , <i>Pseudomonas fluorescens</i> : 33,000,000 CFU/g (3,3x10 ⁷ CFU/g)
Beneficial fungi: Stimulation of root growth and resistance	<i>Trichoderma harzianum</i> , <i>T. reesei</i> , <i>T. viride</i> , <i>Gliocladium virens</i> : 33,000,000 CFU/g (3,3x10 ⁷ CFU/g)
Carrier	Zeolite
Vitamins	Biotin, folic acid, B, B2, B3, B6, B7, B12, C and K
Amino acids	Plant proteins
Soluble yucca extracts	<i>Yucca schidigera</i>
Soluble sea kelp extracts	<i>Ascophyllum nodosum</i>

CFU = Colony Forming Units



This product has been checked for its safety for use in RHP growing media. Specifications are not evaluated.

CULTURE SUBSTRATE ACCORDING TO THE REGULATION FOR ORGANIC AGRICULTURE
The product can be used in organic farming according to EU Eco-Implementing Regulation 889/2008 Article 3 (4).
Listed by FiBL as an input for organic agriculture in Germany.