



# BANANA BIOFERTILIZER KIT

## Growth & Yield Booster

LIQUID BIO-INOCULANTS TECHNOLOGY BASED BIOFERTILIZER CONSORTIA FOR BANANA CULTIVATION

Banana crop has high requirements for various macronutrients, especially potassium and other micronutrients. But it is also sensitive to attack by nematodes and diseases such as Panama wilt and sigatoka leaf spot.

Krishi – Banana Growth and Yield Boosters contain liquid formulations of biofertilizers and other bio-products. Biofertilizers not only facilitate availability of various nutrients to crops in a balanced manner but also enhance efficiency of utilization of applied chemical fertilizers by way of making unavailable forms of nutrients in soil available for root uptake. Subsequent to application of Growth and Yield Boosters, dosage of chemical fertilizer applied can be reduced up to 25%. Consortia of following biofertilizers and bioproducts are used in the formulation of Growth and Yield Boosters:

**Krishi – Azospirillum:** A liquid formulation containing pure cultures of Azospirillum, which facilitates fixation of atmospheric nitrogen in soil. CFU count,  $2 \times 10^9$ /ml.

**Krishi – Phosphobacterium:** A liquid formulation containing pure culture of Phosphorus solubilising bacterium. When applied to the soil, Phosphobacterium produces organic acids and converts insoluble inorganic phosphatic compounds in soil into soluble form and makes them available to plants. CFU count,  $2 \times 10^9$ /ml.

**Krishi – Potash Mobiliser:** A liquid formulation containing pure cultures of Potash Mobilising bacterium. When applied to the soil it facilitates mobilization of K present in soil. CFU count,  $2 \times 10^9$ /ml.

**Krishi – Zinc Solubiliser:** A liquid formulation containing pure cultures of Zinc solubilising bacterium. When applied to the soil

it facilitates solubilisation of unavailable forms of Zn present in soil and makes them available to plants. CFU count,  $2 \times 10^9$ /ml.

**Krishi – Silicate Solubiliser:** Silicate solubilising bacterium produces organic acids and dissolves silica present in soil and makes them available to plants. A liquid formulation with CFU count,  $2 \times 10^9$ /ml.

**Krishi – TryPae Mix:** Contains consortia of fungal antagonists useful for simultaneous control of soil-borne wilt causing fungal plant pathogens and nematodes. A liquid formulation with CFU count,  $2 \times 10^8$ /ml

**Krishi – Pseudomonas:** Contains plant growth promoting cum disease preventing bacterium, *Pseudomonas fluorescens*. A liquid formulation with CFU of  $2 \times 10^9$  per ml.

Application of adequate quantities of farmyard manure/organic manure is essential for the success of biofertilizer technology.

### **Krishi – Banana Growth & Yield Boosters:**

**Banana – Growth Booster # 1:** Recommended for young banana plants immediately after planting for meeting nutrient requirements and root establishment. Contains selected microbial cultures for fixation of nitrogen in soil, and for solubilisation of phosphorus, potash, and zinc in soil. Also contains inoculants for control of soil-borne fungal pathogens & nematodes.

**Banana – Growth Booster # 2:** Recommended for banana crop around 2 to 3 months after planting. Nutrient demand of



- ❖ Contains liquid formulations of bio-fertilizer consortia
- ❖ Provides nutrient at specific stage of crop growth
- ❖ Prevents nematodes and wilt diseases
- ❖ Helps to reduce dosage of chemical fertilizers

young plants at this stage in general is very high. Banana – Bio-Booster # 2 contains microbial cultures for nitrogen fixation, solubilisation of P, K-mobilisation and zinc and solubilisation. Also contains inoculants for control of soil-borne fungal pathogens & nematodes.

**Banana – Growth Booster # 3:** Recommended for Banana crop of about 4<sup>th</sup> to 5<sup>th</sup> months age. Bio-Booster # 3 contains inoculants for P-Solubilisation, K-mobilisation, zinc solubilisation and Silica (Si) and Fe/Mg solubilisation. Also contains inoculants for control of soil-borne fungal pathogens & nematodes.

**Banana – Yield Booster # 4 & 5:** Recommended for banana crop from sixth months to maturity. Contains cultures for K-mobilisation, Si, Zn and S solubilisation and other useful bioinoculants for boosting yield. Also contains inoculants for control of soil-borne fungal pathogens & nematodes.

**Dosage and method of application of Banana Growth & Yield Boosters:-**

<i>Name of Booster</i>	<i>Dosage</i>	<i>Time of application</i>
Growth Booster # 1	One liter/acre	Basal (up to 30 days after planting)
Growth Booster # 2	One liter/acre	60 to 90 days after planting
Growth Booster # 3	One liter/acre	4 <sup>th</sup> to 5 <sup>th</sup> month after planting
Yield Booster # 4	One liter/acre	6 <sup>th</sup> Month after planting (optional 5 <sup>th</sup> )
Yield Booster # 5	One liter/acre	7 <sup>th</sup> Month after planting (optional 8 <sup>th</sup> & 9 <sup>th</sup> )

- \* Banana planting materials can be treated by soaking them in water containing Banana Growth Booster # 1.
- \* In addition to the above application schedule, once a month soil application of Banana Yield Booster # 5 after 7<sup>th</sup> month till 9<sup>th</sup> month will be beneficial (Not included in the kit, but can be purchased separately).
- \* In addition to the above schedule, Soil application of Krishi – TryPae Mix and Krishi- Pseudomonas each at 500 ml per acre at basal, 60 to 90 days and 5<sup>th</sup> month after is recommended (Krishi-TryPae Mix and Krishi-Pseudomonas not part of the kit).

**Method of application:** Contents of Krishi-Banana Growth & Yield Booster combo pack are meant for soil application only. Contents of each booster can be mixed in a small quantity of water or well-decomposed organic manure and applied directly to the root zone or can be applied through the fertigation system. Following application of Growth & yield Booster, doses of applied chemical fertilizer can be reduced by 15 to 25%.

**Packing:** A combo pack consists of one liter each of Growth & Yield Boosters. A master contains 2 x 5 lit combo pack sufficient for two acres. Additional requirements of Booster 4 and 5 may be purchased separately.

**Shelf-life:** Two years.

**General precautions:** A gap of 3 to 7 days should be allowed between application of chemical fertilizer/ other farm chemicals and biofertilizers.

**Storage:** Biofertilizer kits must be stored in a cool and dry place away from direct sunlight.



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**GOKULAM ENTERPRISES**

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**Net Content : 2 x 5 Ltrs. per carton sufficient for 2 acres**

Local Contact Address :